

## QUEENSLAND'S GEOTHERMAL EXPLORATION LEGISLATION\*

### Introduction

Geothermal exploration in Queensland has been hampered by legal and practical difficulties in the past. The Queensland Government has now enacted legislation to assist in developing geothermal exploration in the State.<sup>1</sup>

### Geothermal Material and Energy

Geothermal material (naturally occurring rock and other material with high temperatures) can be exploited to produce electricity, hot water and other outputs through the extraction of naturally occurring hot water and steam or by the injection (and later extraction) of water into dry hot rocks. The production of electricity using geothermal resources is regarded as having low emissions and is eligible for the creation of renewable energy certificates under the MRET Scheme.<sup>2</sup> The resource is thought to be abundant and the relatively unpopulated south-west area of Queensland lends itself to exploration and development.<sup>3</sup>

To date, geothermal exploration and development has been hampered by legal and practical difficulties. These include the resources required to explore for, and prove up, geothermal reserves (akin to those associated with the exploration for on- and off-shore gas and petroleum), and the (potentially) incompatible ambitions of (traditional) minerals explorers and producers, pastoral interests, water users, native title holders and the like. There has also been a question as to how to best categorise geothermal resources. Some jurisdictions (such as NSW) treat geothermal resources as a mineral.<sup>4</sup> Others (such as South Australia) deal with them as regulated activities under their petroleum legislation.<sup>5</sup> Queensland treats geothermal resources as a unique category in its own right.

### Exploration Only, Not Development

The Act principally deals with geothermal exploration. Development and exploitation is to be addressed by a more comprehensive legislative regime that is currently being developed. Thus, the exploration legislation represents an interim approach to allow on-the-ground exploration ahead of the more comprehensive development and exploitation regime to be introduced in the next few years.<sup>6</sup>

### Structure of Legislation

The legislation is structured to:

- provide that geothermal energy within Queensland is (and always has been) the property of the State of Queensland. A person does not acquire property in geothermal energy by reason of discovering it, nor the underpinning geothermal material. Every land grant is subjected to reservations in favour of the State of Queensland over all geothermal energy on or below the

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<sup>1</sup> *Geothermal Exploration Act 2004* (Act No 12 of 2004).

<sup>2</sup> *(Commonwealth) Renewable Energy (Electricity) Act 2000*, s 17.

<sup>3</sup> Explanatory Notes p 1.

<sup>4</sup> *Mining Regulation 2003* (NSW), Reg 5, Sched 2.

<sup>5</sup> *Petroleum Act 2000* (SA), s 10(e).

<sup>6</sup> Explanatory Notes p 4.

land surface and the State's exclusive right to authorise the carrying out of exploration and extraction of geothermal energy;<sup>7</sup>

- prohibit the carrying out of geothermal exploration, unless holding a geothermal exploration permit (GE Permit);<sup>8</sup>
- prohibit the extraction of geothermal energy (and related activities), unless authorised under the legislation or regulations. Regulations may permit extraction only if it is for domestic or associated hot-water usage or for remote power generation of no more than 250kW. The proposed more comprehensive exploration and development regime will no doubt shed more light on other extraction rights;<sup>9</sup>
- permit (without compelling) the Minister to call for tenders for a GE Permit for an area of land. GE Permits can only be issued as a result of such a tender process;<sup>10</sup> and
- deal with the conflicting interests of geothermal explorers and others. As between certain mining and petroleum interests<sup>11</sup> and GE Permits, precedence is given to the *first mover*; that is, activity under the relevant mining or petroleum interest cannot be carried out if it would adversely affect geothermal exploration that has already started.<sup>12</sup> Conversely, geothermal exploration cannot be carried out if it would adversely affect activities (already started) under certain other mining or petroleum interests.<sup>13</sup> To deal with conflicts between landholders (including native title holders) and GE Permits, the Minister may, at the time of calling for tenders, embargo areas such that exploration rights may not be exercised at all.<sup>14</sup> As to restricted land (including land over which there are production interests, reserves, State forests and land in close proximity to permanent buildings, stockyards, water infrastructure, significant Aboriginal and Torres Strait Islander areas or heritage registered places), exploration may only be conducted if consent is obtained from each relevant person and filed with the Chief Executive.<sup>15</sup> As to all other land, the permit holder must give prior notice (to each landholder and native title body for the land and copied to the Chief Executive) before entering the land for exploration purposes.<sup>16</sup>

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<sup>7</sup> GE Act, ss 11 and 12.

<sup>8</sup> GE Act, s 13.

<sup>9</sup> GE Act, s 14.

<sup>10</sup> GE Act, Ch 3; s 16.

<sup>11</sup> The relevant mining and petroleum interests are prospecting permits, mineral development licences and exploration permits under the *Mineral Resources Act 1989* and authorities to prospect and land the subject of a pipeline licence (which is not also the subject of a pipeline easement) under the *Petroleum Act 1923*.

<sup>12</sup> GE Act, ss 6 and 7.

<sup>13</sup> GE Act, s 35. The relevant mining and petroleum interests are mining tenements under the *Mineral Resources Act 1989* and an authority to prospect, entry permission, refinery permission, permit or petroleum lease under the *Petroleum Act 1923*.

<sup>14</sup> GE Act, ss 84 and 85.

<sup>15</sup> GE Act, s 87. Application may also be made to the Land and Resources Tribunal to obtain an access consent or to vary the consent or the conditions of the consent. The Tribunal may give or vary the consent only if it is satisfied that the applicant has used reasonable endeavours (over at least three months) to negotiate the access consent and has been unreasonably refused or that unreasonable conditions of the consent have been proposed or that the applicant has been unable to contact the relevant persons to obtain the consent.

<sup>16</sup> GE Act, ss 91, 96.

## Issues

### *Tender Process*

The Act contemplates a tender process for the granting of exploration permits. Permits may not be obtained in any other way. This may be contrasted with NSW and South Australia, where applications may be made for permits. The Act does not explicitly permit cash bidding, which is an option under the Offshore Petroleum Work Program Bidding System.<sup>17</sup> The Minister is empowered to use any process to decide whether to grant a permit (including a process involving a preferred tenderer), though the tender process itself is somewhat prescriptive as to timing, form and content of tenders and so on.<sup>18</sup>

While the Explanatory Notes state that no 'merits' appeal rights will be available regarding the grant of new exploration permits, there is no ouster of the *Judicial Review Act*, meaning that aggrieved persons adversely affected by an administrative decision to not grant a permit, or to grant a permit on certain conditions, may be able to challenge those decisions.<sup>19</sup>

Given the high stakes and resources that may be involved in tendering for a new permit, the somewhat prescriptive tender process contemplated, the ability for tenderers to amend their tenders at any time before the closing time and there being no explicit obligation on the Minister to keep lodged tenders confidential, it remains to be seen whether the competitive tender process will indeed be the 'timely, effective and efficient regime to allow the commencement of geothermal exploration in Queensland' contemplated in the Explanatory Notes.<sup>20</sup>

### **Agreed Specific Objectives**

Tenderers are required to identify specific objectives for each year of the relevant permit.<sup>21</sup> It is a prerequisite to the grant of a permit that the Minister and the tenderer agree on the specific objectives for the permit.<sup>22</sup> Permit holders are required to achieve the agreed specific objectives within the time provided for in the objectives, although breaching that obligation does not give rise to an action for breach of statutory duty or any other civil right or remedy (eg specific performance). In any case, a tenderer's (past) history of compliance with the legislation and similar resource exploration (in Queensland and elsewhere) must be taken into account by the Minister in deciding whether to grant a GE Permit.<sup>23</sup>

While the Act does not define what might comprise specific objectives, the Explanatory Notes state that they are a critical component and the minimum requirements for permits. The Explanatory Notes also note the intention that the objectives be outcome-based, rather than process-based (eg not simply an undertaking to expend not less than a specified dollar amount in a year). Having said that, the Explanatory Notes recognise that objectives measured by reference to quantum of work undertaken also have their shortcomings.<sup>24</sup>

It is as vital to ensure that the tendered specific objectives are sufficiently clear to enable the Minister to make a meaningful comparison and assessment against other tenderers (and in the absence of other tenders against other criteria) as it is to write the agreed specific objectives into the permit in such a way as to be unambiguous (so that both the permit holder and the Minister

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<sup>17</sup> *Petroleum (Submerged Lands) Act 1967* (Cth), s 22A.

<sup>18</sup> GE Act, s 26(1).

<sup>19</sup> Explanatory Notes p 3; *Judicial Review Act 1991* (Qld).

<sup>20</sup> Explanatory Notes p 2.

<sup>21</sup> GE Act, s 22.

<sup>22</sup> GE Act, s 31.

<sup>23</sup> GE Act, ss 41, 8(3), 28.

<sup>24</sup> Explanatory Notes pp 17-18.

have a clear expectation of what is required of permit holders). Given the potential for loss of 'good standing', it is surprising that more guidance is not given in the Act as to what form the specified objectives are likely to take.

Also, given the publicised difficulties associated with the ill-fated appraisal of the Cornea oil and gas discovery under the *Petroleum (Submerged Lands) Act 1967* (Cth), which has a similar exploration regime, it would have been welcome if some guidance had been included in the Act about the criteria that would need to be met by a permit holder in order to maintain good standing, notwithstanding non-compliance with the terms of an exploration permit.<sup>25</sup>

### **Interaction with Others**

While the Act provides rules about precedence between competing interests, the rules may lead to practical and policy difficulties. One of the tests is whether a relevant activity has 'already started': eg has the 'geothermal exploration... already started'? Some would argue that it is not sufficient that an activity has started, but it must be continuing in order for it to preclude activities by others. Furthermore, given that geothermal exploration is defined as including 'carrying out investigations and other activities associated with exploring', it is conceivable that 'other activity' may nevertheless adversely affect the carrying out of that type of geothermal exploration, even if there is no physical manifestation of that exploration on the land in question. Lastly, it is sufficient that activities have an 'adverse effect'. Some would suggest that a degree of materiality is necessary before activities by others be precluded.

### **Confidentiality of Information**

The Act is silent as to confidentiality of tenders for permits (notwithstanding tenders are required to contain significant information about proposed work programs and the financial and technical resources of the tenderer, among other matters).<sup>26</sup> Particularly in the context of a competitive tender (in which tenderers may amend their tenders before the closing date), one would have expected an explicit requirement that the Minister would maintain confidentiality of lodged tenders (at least until the close of tenders).<sup>27</sup>

Permit holders can also be required to provide a statement as to the holder's financial or technical ability to carry out the work required under a permit (in circumstances where it is reasonably believed that a change in circumstances may affect the holder's ability to carry out that work); to report to the Chief Executive about the carrying out and the results of exploration; to provide samples of materials obtained in the carrying out of exploration; and to give notice of the discovery of any significant occurrence of geothermal material, petroleum or minerals.<sup>28</sup>

None of this information is subject to a confidentiality obligation. Potential tenderers for exploration permits may view these obligations to disclose commercially sensitive information as problematical. In the case of SA geothermal resources, an exploration permit holder who discovers geothermal material has a (conditional) right to a retention or production licence.<sup>29</sup>

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<sup>25</sup> See Maloney, 'Australia's Offshore Petroleum Work Program Bidding System' (2003) 21 *Journal of Energy and Natural Resources Law* 127-142, for a detailed discussion of the issues and legislative and administrative responses.

<sup>26</sup> GE Act, s 21.

<sup>27</sup> GE Act, s 24.

<sup>28</sup> GE Act, ss 49, 50, 106.

<sup>29</sup> *Petroleum Act 2000* (SA), s 21(2); the position is similar under the *Petroleum Act* (Qld) as to petroleum/gas discovery and as to offshore petroleum.

While this matter can presumably be dealt with in the forthcoming, more expansive legislative regime, those seeking exploration permits under the exploration legislation may, in the interim, be reluctant to devote extensive resources, while there is no clear picture about how their exploration efforts are to be rewarded (or at least protected against late-coming freeloaders).

### **Conclusion**

The enactment of the Geothermal Exploration Act is welcomed. Its impact will be enhanced by moving rapidly to introduction of the full exploration, development and exploitation regime.

### **QUEENSLAND PARLIAMENT INTRODUCES *PETROLEUM AND GAS (PRODUCTION AND SAFETY) BILL\****

The Queensland Parliament recently introduced a long awaited Bill which completely rewrites the Queensland legislation regulating the petroleum and gas industries. However, industry has not seen the last of the existing *Petroleum Act 1923*.

The *Petroleum and Gas (Production and Safety) Bill 2004* represents a significant evolution of the laws regulating the petroleum and gas industries in Queensland. The new Bill is substantial – approximately seven times the size of the existing legislation and over 650 pages in length.

However, the new Bill will not completely replace the existing *Petroleum Act 1923*. For native title reasons, the government has flagged its intention to retain the *Petroleum Act 1923* so that existing petroleum tenement holders do not lose crucial existing rights which currently allow them to effectively bypass delays associated with native title. It is not currently totally clear how the *Petroleum Act 1923* and the new Bill will interact and what shape the *Petroleum Act 1923* will take in the future, as it is intended that a further Bill will be introduced into Parliament before 30 June 2004 amending the *Petroleum Act 1923*.

Both Bills, together representing the future petroleum and gas regime, will be debated jointly in Parliament later this year. Some of the key features of the Bill are set out below.

### **Coal Seam Gas Regime**

One of the main catalysts for the introduction of the new Bill has been Queensland's blossoming coal seam gas (CSG) industry. Not surprisingly, an entire chapter of the Bill is dedicated to this topic, and a further corresponding chapter is inserted into the *Mineral Resources Act 1989*.

The principle features of the regime are:

- Rights to commercially produce CSG will be way of petroleum leases, although coal and oil shale mining leases will have the right to "incidental CSG" necessarily extracted as part of safe mining practices.
- Petroleum leases can only be granted over existing coal or oil shale mining leases, and vice-versa, if the existing lease holder enters into a "coordination arrangement" with the person seeking the overlapping lease. There is an obligation on the parties to "make reasonable attempts" to reach such a coordination arrangement, but a person cannot be compelled to do so.
- A petroleum lease can be granted over an area of land that is subject to a coal or oil shale exploration tenement without necessarily obtaining the prior consent of the holder of that exploration title. However, the applicant for the petroleum lease in such circumstances will

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