

25 June 2021

To: The Ministry of Business, Innovation & Employment

via e-mail: building@mbie.govt.nz

Submission on A Proposed Occupational Regulatory Regime for Engineers

Introduction

1. Energy Skills Aotearoa (Energy Skills) works alongside companies from across the energy sector, that have the common goal of attracting, promoting, and developing talent for the New Zealand energy industry. It recently merged to become a part of Energy Resources Aotearoa.¹
2. Energy Skills has been in operation for ten years as the skill development organisation, operating on behalf of the local energy industry and has the following goals:
 - **INFLUENCE** - A clear and united voice for the energy industry for education and skill development initiatives.
 - **EDUCATION** - Lead the development of education Initiatives for the energy industry.
 - **INDUSTRY COLLABORATION** - Lead the collaboration of the energy industry towards a sustainable skill model.
 - **WORKFORCE DEVELOPMENT** - Upskill and create pathways for new and existing talent in the energy industry.
 - **TALENT RECRUITMENT** - Provide quality recruitment processes to meet the needs of Industry.

1. Energy Resources Aotearoa (“Energy Resources”) represents energy-intensive firms in the energy resources sector, from explorers and producers to distributors and users of natural resources like oil, LPG, natural gas and hydrogen.

Submission

3. This document constitutes Energy Skills submission in relation to the *Proposed occupational regulation for engineers* discussion document (referred as 'the discussion document').
4. Energy Skills supports further discussion across industry sectors that refers to:
 - a. regulation being proportionate to the risks to public safety and wellbeing;
 - b. engineers providing services with reasonable care and skill, including by practising within their areas and levels of expertise and being held to account for substandard work or poor behaviour; and
 - c. the extensive economic literature on the downsides of professional licencing regimes. Reference to this can be found in **Appendix One**.
5. The discussion document recommends establishing a regulatory board of some sort to report to the Minister for Building and Construction with the Ministry of Business, Innovation and Employment (MBIE) providing oversight and monitoring. Energy Skills suggests this is impracticable as many engineers are employed in various other industries that the Building and Construction branch of MBIE does not have exposure to (for example the subdisciplines on petroleum engineers) and would therefore have capacity and capability issues in regulating.

The need to consider the status quo regime in the energy sector

6. There is already substantial corporate and government regulation and enforcement of personnel and practises within the energy industry in New Zealand. Energy operators typically have internal codes and standards supplemented by requirements from international Classification Societies such as Bureau Veritas.
7. Policy and Legislative requirements for the New Zealand energy industry framework are already included in the following:
 - a. Crown Minerals Act 1991;
 - b. Resource Management Act 1991;
 - c. Continental Shelf Act 1964;
 - d. Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012;
 - e. Health and Safety at Work Act 2015;
 - f. Climate Change Response Act 2002;
 - g. Maritime Transport Act 1994 and Marine Protection Rules;

- h. Marine Mammals Protection Act 1978;
 - i. Marine and Coastal Area (Takutai Moana) Act 2011; and
 - j. Biosecurity Act 1993
8. Most of these are not specific to engineering standards but they are about positive outcomes. The Health and Safety at Work Act 2015 is of particular importance to professional engineering practice, as its regulations are prescriptive in terms of managing risk. Before considering further regulations, the status quo should be carefully evaluated and we would draw attention to the:
- a. Health and Safety at Work (Hazardous Substances) Regulations 2017;
 - b. Health and Safety at Work (Major Hazard Facilities) Regulations 2017;
 - c. Health and Safety at Work (Petroleum Exploration and Extraction) Regulations 2016;
 - d. Health and Safety in Employment (Pipelines) Regulations 1999; and
 - e. Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999.

Factoring in other policy development processes

9. The reform of vocational education includes provisions for new assessment and competency verification processes such as greater use of capstones with the explicit intent of lifting the quality, competency and relevancy of vocational training that will capture a number of the engineering occupations noted.
10. An occupational licencing framework should not be introduced until MBIE can articulate how it will be aligned to, and add value to, the extensive 'once in a generation' reform of vocational education, and why industry can not have confidence in the integrity of the qualifications framework to verify competency of engineering professionals.

Adverse consequences of regulation

11. Excessive regulation of engineers in the energy sector could have adverse consequences for energy security and on the transition to low emissions. As New Zealand moves towards a low emissions economy, transition of highly skilled and experienced engineers will be imperative for new emerging energy industries.
12. It is important that we do not further burden this transition with additional and unnecessary occupational regulations. Additional compliance in occupational regulations will likely have an adverse effect on future skill resourcing for the energy industry and could potentially negatively affect a sustainable future workforce for the industry.

13. Energy Skills anticipates future skills shortages in engineering roles. With the current uncertainty surrounding energy markets in New Zealand and therefore investment hesitancy, there is a high chance that highly skilled labour including engineers will relocate offshore for work where there is greater confidence in markets. We would also like to draw attention to the fact the energy industry uses many internationally qualified, highly skilled engineering roles.
14. Energy Skills strongly suggests a collaborative approach to further consultation is needed, to ensure the energy industry is provided with the opportunity for further consultation, particularly in the development of any minimum standards surrounding those engineering roles that are relevant.

Moving Forward Collaboratively

15. Should any regulated occupational legislation be implemented we ask that an effective recognised prior registration system be activated that identifies and recognises appropriate international registrations and prior work experience.
16. Energy Skills notes the discussion document seems to place the majority of regulation burden onto individuals rather than addressing central and regional government management and consent processes.
17. Energy Skills is not inclined to support further occupational regulatory legislation for the industry, especially without detailed consideration by officials of the status quo in our sector and further discussions with us, and we look forward to engaging with MBIE over time as this policy process evolves.

Appendix One: Economic issues arising from occupational licencing

Kleiner² comments that:

The study of the regulation of occupations has a long and distinguished tradition in economics... ..But even though occupational licensing has historically been among the most examined institutions in labor economics, this institution has received relatively little recent attention, either from academics or the public policy press.

Given this observation we take the opportunity to draw out some concerns that the economic literature expresses about occupational licencing. Research from the Brookings Institute³ says:

By erecting a barrier to entry into an occupation, occupational licensing can slow job growth and limit employment opportunities.
Occupational licensing can also be costly to consumers, who may pay as much as 15 percent more for services when an occupation is licensed, according to some estimates.

Kleiner⁴, in identifying downsides of occupational licencing writes:

Skeptics of occupational licensing point out that the empirical evidence on the increase in quality, greater level of training, or avoidance of catastrophes is often thin or nonexistent. They argue that if a signal of quality is important, certification is a better way of accomplishing the goal than occupational licensing. Moreover, the skeptics argue that any remaining beneficial effects of occupational licensing are more than offset by the monopoly effects of restriction of supply of practitioners.
Once an occupation is regulated, members of that occupation in a geographic or political jurisdiction can implement tougher statutes or examination pass rates and may gain relative to those who have easier requirements by further restricting the supply of labor and obtaining economic rents for incumbents.

The Brookings Institute⁵ makes the point that:

With such large potential consequences for worker opportunities and consumer prices, balancing the pros and cons of licensing would seem to be critical, but remarkably the status quo seldom takes such a careful approach.

We echo this sentiment of needing to carefully assess pros and cons, and ask that the energy sector be specifically engaged as this policy process unfolds so that the status

² The Journal of Economic Perspectives, Vol. 14, No. 4. (Autumn, 2000), pp. 189-202
<http://links.jstor.org/sici?sici=0895-3309%28200023%2914%3A4%3C189%3AOL%3E2.0.CO%3B2-0>

³ <https://www.brookings.edu/blog/up-front/2015/01/27/nearly-30-percent-of-workers-in-the-u-s-need-a-license-to-perform-their-job-it-is-time-to-examine-occupational-licensing-practices/>

⁴ *ibid.*

⁵ *ibid.*

quo can be well understood before any problem definition is firmed up and before regulations are progressed.

Before looking to regulation, we ask officials to consider current certification regimes. We note that Kleiner⁶ supports this sentiment in writing:

... where politically feasible, certain occupations that are licensed would be reclassified to a system of certification or no regulation. If federal, state, and local governments were to undertake these proposals, evidence suggests that employment in these regulated occupations would grow, consumer access to goods and services would expand, and prices would fall.

In thinking about occupational licencing, officials should consider the pros and cons of government licensing vs industry certification and voluntary signalling initiatives (such as rating agencies). Officials should also engage with the concepts of rent seeking, closed shops and public choice theory (with a public choice lens applied to bodies given powers to regulate occupations).

It is also important to consider the comprehensive risks and costs of government regulation. In addition to the direct costs, transaction costs and opportunity costs of resources spent on compliance, it is important to also consider the risks of government failure, which can occur because of:

- a. political failure: legislation responds to interest groups at the expense of the general public;
- b. bureaucratic failure: government agencies may advance their own interests (e.g. expanding budgets and influence) rather than addressing the original problem that warranted intervention in the first place;
- c. judicial failure: slow, costly and uncertain legal processes can arise from new regulations.
- d. regulatory capture: regulatory agencies can end up captured by stakeholders in the regulated industry; and
- e. regulatory creep: where additional costly regulations are needed to manage unintended consequences of the original policy).

There is a particular tension when a professional body sets quality standards that have the effect of limiting quantity. If a professional body sets those rules, it will face a trade-off between setting the rules that provide the best outcomes for consumers of the services, and the rules that best provide economic rents to incumbents in the system protected against competitors' entry. Where the Commerce Commission is forbidden against investigating the effects of these arrangements, it is even more important that appropriate diligence is applied before setting one in the first place.

Finally, decision-makers should be provided with a competent regulatory impact analysis including a cost-benefit analysis.

⁶ <https://www.brookings.edu/research/reforming-occupational-licensing-policies/>