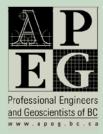
REPORT OF THE APEGBC/ASTTBC LIMITED LICENCE RENEWAL TASK FORCE

# with recommendations to **APEGBC & ASTTBC Councils**





18 March 2011

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### INTRODUCTION

In December 2010, the Councils of APEGBC and ASTTBC jointly approved the formation of a Limited Licence Renewal Task Force (*the Task Force*) which was to review the APEGBC Limited Licence and make recommendations to both Councils by March 31, 2011.

The Task Force held eight meetings over a two-month period including a joint meeting with the ASTTBC/APEGBC PTech Task Force. Task force meeting minutes and this report were shared with the PTech Task Force.

Areas investigated by the Task Force included:

- Progress on recommendations from the Report of the 2006 Limited Licence Task Force
- Utility of the Limited Licence for Engineering or Geoscience Licensees
- Acceptance of the Limited Licence by Others, including Authorities Having Jurisdiction
- Scope development and format
- Evaluation of new applicants
- Major and minor scope changes and associated evaluation processes
- Promotion of the Limited Licence and recognition of Engineering or Geoscience Licensees
- Designation of the Limited Licence and Engineering or Geoscience Licensees
- Bridging opportunities to Professional Engineer/Geoscientist
- Membership status of Engineering or Geoscience Licensees within APEGBC
- Mobility of Engineering or Geoscience Licensees within Canada
- Relationship between Limited Licence and a PTech scope of practice.

The Task Force determined that the Limited Licence program needs to be contemporized and revitalized to make it an attractive and inclusive alternative for independent practice of professional engineering and geosciences in B.C., while maintaining high standards of entry and practice.

Findings and conclusions related to these topical areas are presented in the report.

Recommendations of the Task Force were shaped by input from current Engineering or Geoscience Licensees, comparison to practices of other professions and jurisdictions, discussion with subject matter experts and group discussion. A list of reference material in the form of surveys, briefing notes, environmental scans<sup>1</sup> and submissions from others is in the Background Material Section on Page 26. A selection of this material has been included in the Appendices (Page 27).

<sup>&</sup>lt;sup>1</sup> Environmental scanning is the acquisition and use of information about events, trends, and relationships in an organization's external environment, the knowledge of which would assist management in planning the organization's future course of action.

The Task Force addressed a range of aspects that it feels can and should be improved. These include:

- scope wording that can be confusing, may limit practice in an impractical way and portray a
  reluctance on the part of APEGBC to rely on the Engineering or Geoscience Licensee's
  professional judgment and adherence to the Code of Ethics;
- a cumbersome and costly qualification process;
- a sometimes condescending tone to wording on APEGBC's website;
- a lack of inclusion of Engineering or Geoscience Licensees in APEGBC affairs;
- the word 'Limited' as a descriptor for the Licence; and
- promotion of the Eng.L.. and Geo.L.. brand by APEGBC to the public, legislators, employers and its members has been lacking, creating a perception by these groups that this designation is 'second-class'.

## **SUMMARY OF RECOMMENDATIONS**

Recommendations have been categorized as 'Core' or 'Supporting'.

In most cases, Supporting Recommendations are required to implement Core Recommendations.

#### **CORE RECOMMENDATIONS**

- 1. that the Registration Committee be requested to implement the proposed standard, simplified scope format and the Guide to Developing a Scope of Practice be rewritten to incorporate the new format and scope development guidelines, including a list of typical limitations and exclusions for each area of practice. (Page 10)
- 2. that the Limited Licence New Applicant process be reviewed by the Registration Committee as part of its process re-engineering project with an eye to streamlining it.(Page 16)
- 3. that a Bridging Implementation Task Force be established to review and recommend processes to facilitate bridging from Engineering (Geoscience) Licensee to Professional Engineer (Geoscientist).(Page 18)
- 4. that APEGBC immediately and aggressively reinforce to the Provincial Government, other Authorities Having Jurisdiction and Others that the Engineers and Geoscientists Act gives Engineering and Geoscience Licensees full authority to practice professional engineering or professional geoscience in their scopes of practice. (Page 20)
- 5. that Engineering Licensees and Geoscience Licensees be included in the definition of Member at the next opportunity for an Act and/or Bylaw change. (Page 22)
- 6. that APEGBC recommend to its sister regulatory bodies that mobility of Limited Licences and related designations be studied on a national basis.(Page 22)

### **SUPPORTING RECOMMENDATIONS**

- 1a. that current Engineering or Geoscience Licensees be offered for a limited time (6 months) at no cost to themselves, a reformatting of their scopes to match the proposed scope format model, and/or grammatical changes to their scopes that do not change the boundaries of the scope.(Page 12)
- 1b. that the Registration Committee be requested to adopt (a) the definition of Minor and Major Scope Changes and (b) the proposed evaluation process for Minor Scope Changes. (Page 13)

### SUPPORTING RECOMMENDATIONS CONT'D

- 1c. that Engineering and Geoscience Licensees be offered a Minor Scope Change Review at the time of the five year mandatory Practice Review at no cost to the Licensee. (Page 13)
- 1d. that the fee for other Minor Scope Changes reflect reasonable cost recovery of the associated processing costs. (Page 13)
- 2a. that a sub-committee, reporting to Registration, be created specifically to review each application for a new Limited Licence and to review major scope changes. (Page16)
- 2b. that the Undertaking signed by Engineering and Geoscience Licensees be reworded to remove the requirement to submit a copy of the Limited Licence repeatedly and that the wording read: "I will ensure that clients are aware of the scope of my licence and only provide professional engineering (geoscience) services that are within that scope of practice." (Page 17)
- 3a. that Bylaw 11(e), Registered Member, be changed to require the "equivalent of graduation from" a four year full time university program instead of "graduation from the equivalent of" a four year full time university program as academic qualification for registration.(Page 18)
- 4a. that APEGBC reference Engineering and Geoscience Licensees in its Practice and Other Guidelines, including the Direct Supervision Guideline.(Page 20)
- 4b. that APEGBC regularly refer to and include Engineering and Geoscience Licensees in its documentation, advertising, publications and activities. (Page 21)
- 4c. that APEGBC carry out an extensive review of its website and printed documentation with respect to the term Limited Licence and modify them to be more inclusive of the Limited Licence and to speak to the value of its holders to APEGBC and the practices of professional engineering and geoscience in B..C.. (Page 21)
- 4d. that APEGBC modify the Terms of Reference of its President's Awards to include Engineering and Geoscience Licensees. (Page 21)
- 4e. that APEGBC modify the Terms of Reference of its Committees to include Engineering and Geoscience Licensees, including those committees that affect the entry and practice of Engineering and Geoscience Licensees. (Page 21)
- 4f. that the terminology 'Limited Licence' be reviewed with respect to designations issued by other provinces and that the designation 'Engineering (Geoscience) Licensee" (Eng.L., Geo.L.) be maintained.(Page 21)
- 7. that the APEGBC and ASTTBC Councils consider the P.Tech. scope structure as a possible complement to the Limited Licence revised scope structure. (Page 24)
- 7a. that the APEGBC and ASTTBC Councils consider the merits of two limited scope licences versus one with respect to clarity to the public, memberships and Authorities Having Jurisdiction. (Page 25)
- 8. that a copy of this report be sent to the Subject Matter Experts and Stakeholders who advised the Task Force and responded to its surveys. (Page 25)

# **ACKNOWLEDGEMENTS**

# APEGBC/ASTTBC LIMITED LICENCE RENEWAL TASK FORCE

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ASTTBC/APEGBC PTech Task Force

APEGBC Engineering and Geoscience Licensees who participated in the surveys

ASTTBC Members who responded to the Information Release.

# **TERMS OF REFERENCE AND DELIVERABLES**

The Task Force Terms of Reference set out its Purpose and Deliverables as follows:

#### **PURPOSE:**

To advise the ASTTBC and APEGBC Councils on an improved and more effective Limited Licence system.

#### **DELIVERABLES:**

- 1. Review and consider the Report of the APEGBC Limited Licence Task Force dated Sept. 2006
- 2. Review the current experience in BC and summarize what works well and what needs improvement
- 3. Review the relevant experience across Canada including processes, designations, scopes of practice and legislative framework
- 4. Develop and recommend refinements to the Limited Licence system in BC
- 5. The work of the Task Force will consider, but not address, the Professional Technologist registration and scope of practice as this is within the mandate of another Task Force appointed by the two associations
- 6. Report findings to the APEGBC and ASTTBC Councils by March 31, 2011.

# FINDINGS AND RECOMMENDATIONS

### **REVIEW OF THE 2006 LIMITED LICENCE TASK FORCE REPORT**

The Task Force reviewed the 2006 Limited Licence Task Force Report and noted that its recommendations had mainly been completed and that the four outstanding items were either in progress or awaiting legislative changes. It determined that there was a need for updating of the work done in 2006, in line with the deliverables from its Terms of Reference. Items that had not been fully addressed were:

- Recommendation 14: That voting privileges be extended to holders of Limited Licences, including the right to run for Office.
- Recommendation 15: That a study of the Practice Review model, including as it relates to Limited Licensees, be undertaken as a priority.
- Recommendation 16: That the exploratory initiatives are taken, whether nationally or inter-provincially, to explore mobility opportunities with those Provinces offering Limited Licence programs.
- Recommendation17: That Council considers convening a separate Task Force, or other suitable mechanism, to examine the issue of 'direct supervision'. This review should include the issues of taking responsibility for non-member's work, as well as which persons should be practicing as Limited Licensees.

The 2006 Goal Statement was discussed to determine whether it is still valid for the current Task Force's work. It was decided that the work needed to be contemporized, revisiting unresolved issues and adding new ones, surveying Licence holders and identifying what is working and what is not.

#### STAKEHOLDER CONSULTATION

During its work, the Task Force relied on input from the following subject matter experts and stakeholders:

#### **Subject Matter Experts**

- Peter Mitchell, P.Eng., Director, Professional Practice, Standards and Development, who
  attended a meeting to review APEGBC's efforts to date in promoting the expertise of
  Engineering and Geoscience Licensees to Authorities Having Jurisdiction, and the
  feasibility of referring to Engineering and Geoscience Licensees as well as P.Eng.'s and
  P.Geo.'s in practice guidelines and demand-side legislation
- Janet Sinclair, APEGBC Chief Operating Officer, who attended a meeting to discuss options for promotion of the Limited Licence
- Mark Tokarik, LLB, P.Eng., APEGGA Director, Registration who attended two meetings by conference call and reviewed the APEGGA Professional Licensee designation, legislation and evaluation process, and progress to date on the Professional Technologist designation, governance and evaluation process
- Caroline Westra, APEGBC Manager, Academic and Experience Assessment who attended six meetings and provided insight and examples into the evaluation and scope change processes

# **Stakeholders**

- (8) APEGBC Engineering and Geoscience Licensees (Eng.L. and Geo.L.), who are also members of ASTTBC, and who responded to an informal survey in December 2010 initiated by ASTTBC
- (45) APEGBC Engineering and Geoscience Licensees who responded to a formal Task Force survey in January and February 2011
- ASTTBC/APEGBC Professional Technologist Task Force which requested a joint meeting, held on February 21, 2011, to explore whether the renewed (Limited) Licence can accommodate the Professional Technologist as one licence and with whom the APEGBC/ASTTBC Limited Licence Renewal Task Force shared its minutes and final report;
- Respondents to the APEGBC/ASTTBC Information Release announcing the initiation of the two (LLRTF and PTech) Task Forces and the purpose of their work.

A survey of prospective applicants, employers and members was considered but time did not permit this to be carried out.

# HISTORY OF PRACTICE REVIEW, INVESTIGATION & DISCIPLINE

In accordance with its deliverable to 'summarize what works well', The Task Force reviewed the performance of current Engineering and Geoscience Licensees with respect to APEGBC's Practice Review and Investigation and Discipline programs.

To date, Engineering and Geoscience Licensees have a high percentage of compliance in their Practice Reviews and little exposure to APEGBC's Investigation processes. The Task Force concluded that this is an indication that Engineering and Geoscience Licensees are working within their assigned scopes, are complying with APEGBC's Code of Ethics and are showing a high degree of professionalism.

### **SURVEY RESULTS**

Survey respondents were substantially satisfied with the following aspects of the Limited Licence program:

- By obtaining the Limited Licence, 84.4% had achieved their intended goal (independent practice, regulatory or other requirement, employer recognition)
- 82.2% felt that the qualification requirements are appropriate and that the process is respectful
- 60%+ felt that their scope accurately reflects their competence and (71.1%) is easily
  understood by others, although 57.8% also felt that their scope should be less detailed
  and rely more on their professional judgment
- 68%+ felt that they receive appropriate recognition as an Engineering or Geoscience Licensee from their employer and peers, but less so (60%) from APEGBC, and only 47.7% felt that they receive appropriate recognitions from BC Authorities having Jurisdiction
- 68.9% would recommend the current Limited Licence to a colleague, although this number would increase if the program were enhanced, streamlined and promoted by APEGBC.

### **SCOPE FORMAT AND DEVELOPMENT**

The Task Force reviewed the Limited Licence scopes issued to date and compared them to scopes issued by other jurisdictions on a similar basis of qualification. APEGBC-issued scopes are notably more detailed and limited than those issued by other jurisdictions.

A majority of APEGBC Engineering and Geoscience Licensees who responded to the survey were of the opinion that the wording of their licences should be less detailed and rely more on their professional judgment and that APEGBC should provide an inexpensive expedited process for updating the scope of an existing Engineering or Geoscience Licensee.

"After going through a rigorous process of getting the licence, it feels like your judgment is not trusted by APEGBC. In fact most of the L. Eng. hold responsible positions at work place and society" Survey Respondent

The Task Force agreed that scopes need to be understandable, realistic and dynamic, allowing for a reasonable level of judgment. It addressed the balance between the need for reasonably well-defined scopes and an expectation that Engineering or Geoscience Licensee will follow the Code of Ethics. The Task Force concluded that a simplified and standard scope structure is needed that provides clarity and consistency in scopes and allows an Engineering or Geoscience Licensee to expand his or her scope in a straightforward and simple way in the future when additional competence is gained.

### SIMPLIFIED SCOPE STRUCTURE

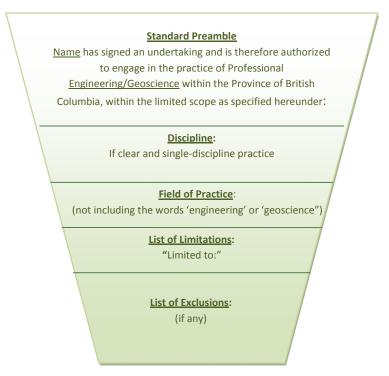
The Task Force proposed a scope format structure (Page 11) and the basis for guidelines for scope development and modification (Table 1) and tested these against six existing scopes, including three scopes held by Task Force members. An example of a current scope and its new format version are on the next page.

### Scope Format Structure (also see Figure 1 on next page)

- 1. General Preamble
- 2. Define discipline of practice, "Discipline: X Engineering (Geoscience)" if the scope can be defined within one discipline, or to add clarity
- 3. Define a subset of the discipline, "Field of Practice: Y" e.g. Municipal Infrastructure, Building Services, Fire Protection (do not include the word engineering or geoscience)
- 4. State any limitations, if any, on practice within a subset of the discipline, "Limited to:" (list)
- 5. State any Exclusions, if any within the limitations, "Exclusions" (list)
- 6. Use terminology in the Act definition of professional engineering/geoscience (design, management, etc) only if needed to define a limitation or exclusion.

# Principles for Scope Composition/Modification

- a. In writing the scope we will use the simplest possible language to describe the scope
- b. Avoid where possible referring to specific sections of a code, standard or regulation
- c. Scopes can grow and change by eliminating Limitations and/or Exclusions when a licensee can prove competence with respect to the limitations or exclusions



#### CURRENT VS NEW FORMAT SCOPE COMPARISON

3. Issuance of technical specifications and contract documents as necessary for the

4. Administration of construction contracts for the above described works, including

and payment for the work performed, and certification of the record drawings.5. All work undertaken shall be in accordance with standard design criteria commonly prescribed in typical municipal subdivision control bylaws or in accordance with other

monitoring of construction for adherence to the contract documents, certification

tendering and construction of the above described works.

regulatory agencies' standard requirements for site development.

#### **Current Scope New Format Scope** Licensee A has signed an undertaking and is therefore authorized to engage in the practice Licensee A has signed an undertaking and is therefore of Professional Engineering in the Province of British Columbia, within the limited scope as authorized to engage in the practice of Professional Engineering in the Province of British Columbia, within specified hereunder: the limited scope as specified hereunder: Professional engineering in the civil discipline, limited to: water distribution, sewerage Discipline: Civil Engineering collection, drainage, and roads, all in accordance with standard municipal requirements for land development in rural areas. Field of Practice: Municipal Infrastructure: Limited to: The scope includes and is limited to: Land development in rural areas 1. Detailed design of: water distribution facilities, sanitary sewerage collection systems, Water distribution facilities, sanitary stormwater collection and discharge facilities for minor drainage areas, local and sewerage collection, stormwater collection collector roads, and site grading. and discharge facilities for minor drainage 2. Conceptual design and performance requirements for pump stations (up to and areas. including 10hp), as necessary for the provision of detailed design drawings and local and collector roads specifications by others.

site grading

detailed design of pumping systems

for pumping systems over 10 hp

conceptual and performance requirements

**Exclusions:** 

Recommendation 1 that the Registration Committee be requested to implement the proposed standard, simplified scope format and the Guide to Developing a Scope of Practice be rewritten to incorporate the new format and scope development guidelines including a list of typical limitations and exclusions for each area of practice.

#### REFORMATTING EXISTING SCOPES

The Task Force considered the survey results and comments that the current scopes can be 'wordy', 'daunting', 'difficult to interpret', 'excessively restrictive' and sometimes neglect to mention the discipline or field of practice, reducing the utility of the Limited Licence. Should the new, simplified scope format be accepted by the Registration Committee, the Task Force recommended that current Engineering and Geoscience Licensees be offered, for a limited time, a free rewriting of their scopes: either to comply with the new format and/or to make grammatical changes (e.g. one licence refers to the Licensee as an 'applicant').

Recommendation 1a that current Engineering and Geoscience Licensees be offered for a limited time (6 months) at no cost to themselves, a reformatting of their scopes to match the proposed scope format model, and/or grammatical changes to their scopes that do not change the boundaries of the scope.

### **SCOPE CHANGE PROCESS**

Survey respondents had indicated that an inexpensive expedited process for updating the scope of an existing Engineering or Geoscience Licensee is needed. The proposed new scope format (page 11) was designed to facilitate minor scope changes by removing limitations and exclusions as the Engineering or Geoscience Licensee acquires additional competence.

The Task Force suggested that major and minor scope changes can be characterized as follows:

Major Scope Change

- Change of discipline
- Change of field of practice

Minor Scope Change

 All other changes to limitations or exclusions(i.e.) Engineering or Geoscience Licensee's competence has matured or improved

The Task Force also addressed the inclusion of Industry as a limitation in some current scopes and determined that it is not a true limitation and it is advisable to remove it from existing scopes.

Recommended requirements for a Minor Scope Change are:

- Submission of supporting examples demonstrating competence to justify removal of an exclusion or limitation
- References/letters of support from 3 professional engineers (or geoscientists) attesting to the competence of the Engineering or Geoscience Licensee in the requested scope area.
- The fee for a Minor Scope Change should reflect reasonable cost recovery of the associated processing cost.

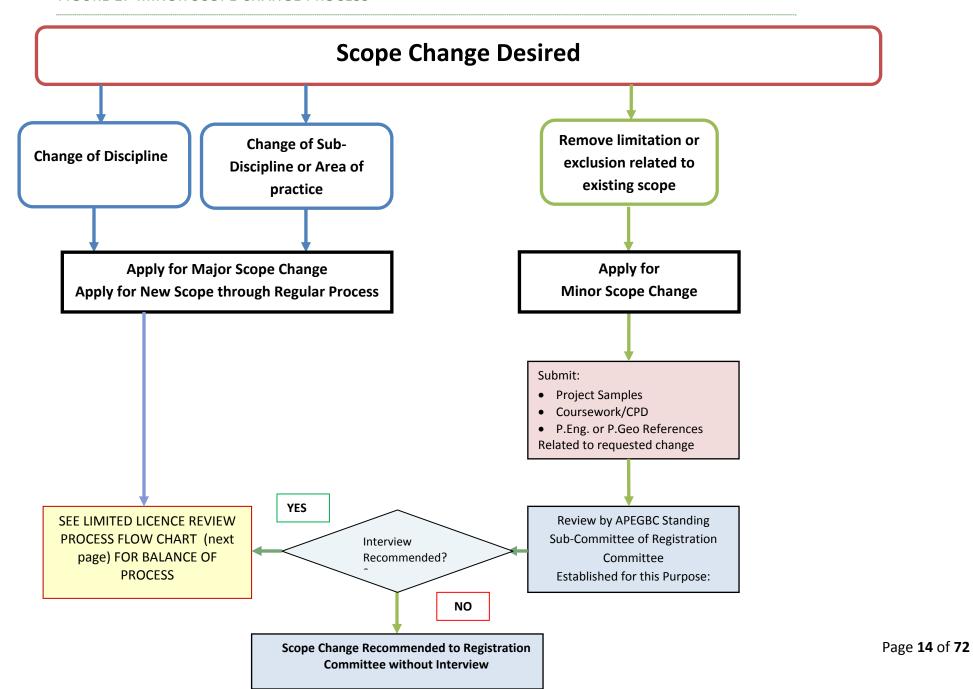
A flow chart outlining the proposed Minor Scope Change process is on the next page.

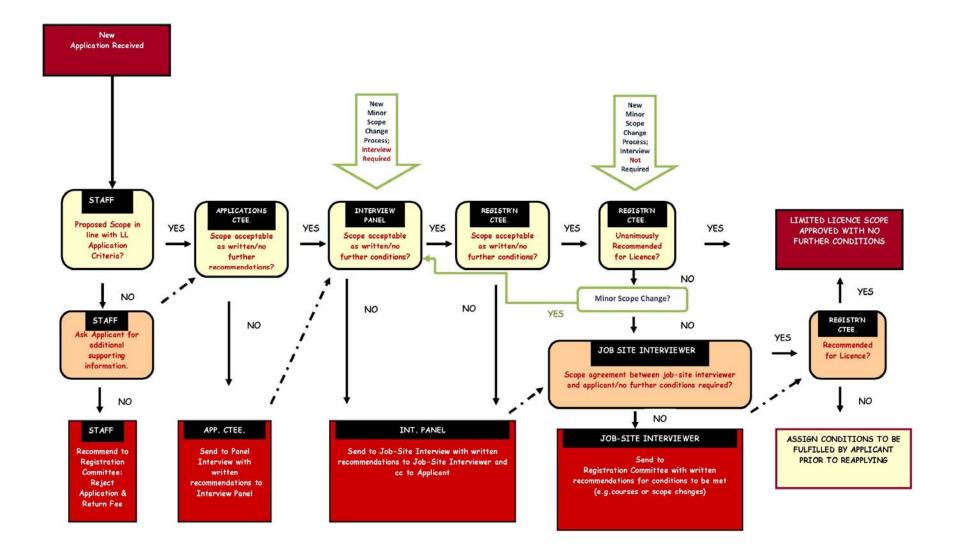
### MINOR SCOPE CHANGE AND PRACTICE REVIEW

Only one-third of survey respondents thought that the five year mandatory Practice Review is appropriate; however Task Force members felt that it should be maintained. The Task Force was pleased to note that APEGBC Council had recently eliminated the fee for this review.

The Task Force saw the five year Practice Review as an opportunity for Engineering and Geoscience Licensees to request a Minor Scope change at no charge to the Licensee. The Minor Scope change would follow the Minor Scope Change process and would be coincident with, but independent of the Practice Review process.

- Recommendation 1b that the Registration Committee be requested to adopt (a) the definition of Minor and Major Scope Changes and (b) the proposed evaluation process for Minor Scope Changes.
- Recommendation 1c that Engineering and Geoscience Licensees be offered a Minor
  Scope Change Review at the time of the five year mandatory
  Practice Review at no cost to the Licensee.
- Recommendation 1d that the fee for other Minor Scope Changes reflect reasonable cost recovery of the associated processing costs.





The Task Force reviewed the current review process for new applications, which is also currently being followed for a Major Scope Change.

It noted that the Registration Committee is currently undertaking a process re-engineering project. A review of responses to the survey indicated that the long and somewhat convoluted process can be a barrier when considering whether to apply.

"When I applied in the mid 1990's it took almost 2 years to have the application completed. I expect that the process has been streamlined since then. Although my colleagues who are interested in getting their Limited Licence appear to shy away when they review the application procedures. Many show interest but none follow through."

It recommended that the Limited Licence New Applicant Process be reviewed by the Registration Committee as part of its process re-engineering project with an eye to streamlining it. It also recommended that

- a. the panel interview have two parts: (i) to determine whether the Applicant is qualified and (ii) to refine the scope with the Applicant.
- the Registration Committee not rewrite scopes at its meeting; rather that if on an exception basis, it wants to add a limitation or exclusion, it be sent back to the Reviewers and the Applicant; and
- c. applications for Limited Licence be reviewed applying recommended policies, processes and scope formats on a consistent and equitable basis. To this end, the Task Force recommends that a standing sub-committee of the Registration Committee be created to review all applications for Limited Licence including new applications and applications for major and minor scope changes and to make recommendations to the Registration Committee.
- Recommendation 2 that the Limited Licence New Applicant process be reviewed by the
  Registration Committee as part of its process re-engineering project
  with an eye to streamlining it.
- Recommendation 2a that a sub-committee, reporting to Registration, be created specifically to review each application for a new Limited Licence and to review major scope changes.

#### UNDERTAKING

All Engineering and Geoscience Licensees are required to sign an undertaking in which they commit to provide a copy of their Limited Licence, scope and limitations:

- i. to all clients at the commencement of any engineering project or work
- ii. with any proposal for engineering consulting work; and
- iii. to their employer (if applicable).

The Task Force noted that survey respondents were reporting that the frequency with which they use their stamp per submission or proposal is greater than that with which they submit their Limited Licence per submission or proposal, which is not in line with the requirement in the Undertaking. The Task Force considered whether the requirement is practical given that clients, AHD's etc with whom Engineering or Geoscience Licensees do frequent business have a copy of the Limited Licence on record.

It recommended that (i) through (iii) above be replaced by, "Ensure that clients are aware of the scope of my licence and only provide professional engineering (geoscience) services that are within that scope of practice." The website should be updated to reflect this change (http://www.apeg.bc.ca/members/LLscopelist.html).

Recommendation 2b that the Undertaking signed by Engineering and Geoscience
Licensees be reworded to remove the requirement to submit a
copy of the Limited Licence repeatedly and that the wording
read: "I will ensure that clients are aware of the scope of my
licence and only provide professional engineering (geoscience)
services that are within that scope of practice."

### BRIDGING TO P.ENG. OR P.GEO.

Survey respondents indicated significant interest in bridging programs and many said that they would follow a bridging program if it were available.

"The idea of a bridge program is interesting and worthwhile. I think any program idea has to take into account situations similar to what I was faced with when I enrolled in the APEGBC student program over 20-years ago. I desperately wanted to become licensed, but had a young family, new mortgage and heavy workload to balance. I just couldn't manage the scale of time required to cover the course load and exams to get certified. I feel that a program has to be practical and manageable within the working lives of applicants." Survey Respondent

The Task Force reviewed a briefing note on bridging programs used by other professions and engineering organizations around the world, as well as a one-time bridging project that APEGBC implemented for Naval Architecture and Marine Engineering (Appendix G – Briefing Note on Bridging from Eng.L./Geo.L. to P.Eng./P.Geo.).

#### **BYLAW CHANGE**

Bylaw 11(e) needs a minor wording change to allow for bridging programs. It currently requires an applicant to have <u>graduated from the equivalent of</u> a four year full time university program in engineering, applied science, science, geoscience or technology versus having <u>the equivalent of graduation from</u> a four year university program in engineering, applied science, science, geoscience or technology. The Registration Committee is currently reviewing the proposed bylaw change.

Recommendation 3	that a Bridging Implementation Task Force be established to review and recommend processes to facilitate bridging from Engineering (Geoscience) Licensee to Professional Engineer (Geoscientist).
Recommendation 3a	that Bylaw 11(e), Registered Member, be changed to require "the equivalent of graduation from" a four year full time university program instead of "graduation from the equivalent of" a four year full time university program as academic qualification for registration.

# RECOGNITION AND PROMOTION OF THE LIMITED LICENCE AND ENGINEERING AND GEOSCIENCE LICENSEES

### TO AUTHORITIES HAVING JURISDICTION

The Task Force spent several meetings discussing the acceptance by Authorities Having Jurisdiction (AHJ's) of a Engineering or Geoscience Licensee's independent right to practice professional engineering or professional geoscience.

It was apparent that some jurisdictions accept the Limited Licence, while others accept it for some Engineering or Geoscience Licensees, but not for others. A recent case regarding one municipality's continued refusal to accept the work of a Licensee despite APEGBC's intervention with both the City and the Province, highlighted the need for APEGBC to work more aggressively towards universal recognition by AHJ's of its Licensees' independent right to practice.

Eight survey respondents said that they had encountered a refusal on the part of an AHJ to recognize their Licences.

"I learned that most approving authorities follow the "Licenced Professional" definition outlined in the either the BC Building Code or the Community Charter, and neither include Limited Licencees." Survey Respondent

"not an outright refusal just offered excuses to deflect from the issue" Survey Respondent

"(Municipality) chief building officer "We don't allow limited licence to do this work" Survey Respondent

"Authority refused to accept work of less complexity as it was not specified in the Licence." Survey Respondent

The Task Force considered ways to address this issue including:

- aggressive reinforcement to the Provincial Government and other Authorities Having
   Jurisdiction of the rights of Engineering and Geoscience Licensees to practice professional engineering and geosciences within their scopes of practice
  - o making this as a selling point in APEGBC Government Relations
- referencing Engineering and Geoscience Licensees in all APEGBC Practice Guidelines including the Direct Supervision Guideline
- featuring Engineering and Geoscience Licensees at the BOABC and UBCM conferences through presentations and exposure at the APEGBC booth;
- working with the Municipal Engineers Division to request that it features the current situation in its newsletter, in a seminar and/or at its AGM; and that it act as an advocate for Eng.L.'s.

Recommendation 4 that APEGBC immediately and aggressively reinforce to the

Provincial Government. other Authorities Having Jurisdiction and Others that the Engineers and Geoscientists Act gives Engineering and Geoscience Licensees full authority to practice professional engineering or professional geoscience in

their scopes of practice.

Recommendation 4a that APEGBC reference Engineering and Geoscience Licensees

in its Practice and Other Guidelines, including the Direct

Supervision Guideline.

## TO EMPLOYERS, MEMBERS AND THE PUBLIC

A significant majority of survey respondents felt that APEGBC should promote the Limited Licence to employers (73.3%), APEGBC members (82.2%) and Authorities Having Jurisdiction (84.4%). Many would recommend Limited Licence to a colleague with its current features; and, if the proposed enhancements including promotion of the Limited Licence were added, almost half again would recommend the Limited Licence to a colleague.

The Task Force noted instances of non-inclusive wording on the APEGBC website and in public documents and strongly advised that it be modified to be more inclusive of the Limited Licence and the value of its holders to APEGBC and the practices of professional engineering and geoscience in B.C.

Suggestions for promoting the Limited Licence that are viable and can be implemented without changes to legislation or policy are:

- a. information articles on the Limited Licence and Engineering and Geoscience Licensees in *Innovation* and *Connections*
- b. Articles portraying Engineering and Geoscience Licensees and their work
- Continuing to have Engineering and Geoscience Licensees present as part of the Division of Engineers and Geoscientists in the Resource Sector Annual Conference stream and add presenters in other streams
- d. Featuring Engineering and Geoscience Licensees as part of Engineering and Geoscience Month
- e. Featuring and inviting Eng.L .and Geo.L.'s to employer visits
- f. Changing APEGBC documents, job ads, etc to include Engineering and Geoscience
  Licensees (two examples given were the recent job ad for Associate Director, Admissions and the AGM signup form); and
- g. Review other APEGBC documentation and web pages for non-inclusive wording and make appropriate revisions.

Suggestions that may require policy change are:

- h. Eligibility of Engineering and Geoscience Licensees for APEGBC and Engineers Canada/Geoscientists Canada Awards
- Naming Eng.L.'s and/or Geo.L.'s as a member representation on APEGBC Committees and Task Forces that make decisions affecting Engineering and Geoscience Licensees and on other committees.

Recommendation 4b that APEGBC regularly refer to and include Engineering and Geoscience Licensees in its documentation, advertising, publications and activities.

Recommendation 4c that APEGBC carry out an extensive review of its website and printed documentation with respect to the term Limited Licence and modify them to be more inclusive of the Limited Licence and to speak to the value of its holders to APEGBC and the practices of professional engineering and geoscience in B.C..

Recommendation 4d that APEGBC modify the Terms of Reference of its President's Awards to include Engineering and Geoscience Licensees.

Recommendation 4e that APEGBC modify the Terms of Reference of its Committees to include Engineering and Geoscience Licensees, including those committees that affect the entry and practice of Engineering and Geoscience Licensees.

#### THE TERMINOLOGY 'LIMITED' LICENCE

The word 'Limited' in the term 'Limited Licence' which is defined in the Engineers and Geoscientists Act (*the Act*) was felt to have a derogatory perception. In 2006, a recommendation was made and implemented that the title be changed to 'Engineering Licensee (Eng.L.) or Geoscience Licensee (Geo.L.). The Task Force requested that this term be reviewed with respect to that used in other provinces and professions:

- Professional Licensee (Alberta)
- Limited Member (Saskatchewan)
- Limited Licence (Ontario)
- Special Practice Permit (Limited LIcence) BC Forest Professionals

Recommendation 4f that the terminology 'Limited Licence' be reviewed with respect to designations issued by other provinces and that the designation 'Engineering (Geoscience) Licensee" (Eng.L., Geo.L.) be maintained.

#### MEMBERSHIP RIGHTS AND PRIVILEGES

\*Membership Rights and Privileges equal to those held by P.Eng. and P.Geo. members include the ability to vote a) at the APEGBC AGM; b) in bylaw ballots; and c) in Council elections; and to run for a position on the APEGBC Council."

Eighty-two percent of Survey Respondents supported granting Membership Rights and Privileges to Engineering and Geoscience Licensees.

The Task Force noted that this was a recommendation (*Recommendation 14: That voting privileges be extended to holders of Limited Licences, including the right to run for Office*) from the 2006 report that had not been acted upon and was now long overdue. It noted that APEGGA Professional Licensees are members of APEGGA and have the right to vote.

Recommendation 5 that Engineering Licensees and Geoscience Licensees be included in the definition of Member at the next opportunity for an Act and/or Bylaw change.

### **MOBILITY**

Although considering mobility of the Limited Licence was not a deliverable in the Task Forces' Terms of Reference, it did review the Memorandum of Agreement between APEGGA and APEGBC and also considered, but did not formally address mobility during its discussions with the PTech Task Force, i.e. How mobility would work:

- If B.C. had one designation (e.g. Engineering or Geoscience Licensee) instead of two; and
- If the individualized Alberta P.Tech. scope were similar to the B.C. Limited Licence scope.

As the issue of mobility was outside its assigned work, the Task Force recommended that it be addressed as part of the National Framework for Licensure project.

Recommendation 6 that APEGBC recommend to its sister regulatory bodies that mobility of Limited Licences and related designations be studied on a national basis.

### PROFESSIONAL TECHNOLOGIST REGISTRATION AND SCOPE OF PRACTICE

The related deliverable of the Task Force is that it, "will consider, but not address, the Professional Technologist registration and scope of practice, as this is within the mandate of another Task Force appointed by the two associations." Mindful of this, the Task Force discussed and explored with the PTech Task Force the concept of one Licence for both designations during the joint meeting on February 21 (Stakeholder Consultation Page 8). During this meeting, the objectives of clarity and avoidance of dilution and/or confusion to applicants, AHJ's and the Public of the role and purpose of an Eng.L. (or Geo.L.) versus that of a PTech were discussed.

The Task Force also concluded, that on a technical basis and exclusive of governance issues, the Limited Licence revitalized new structure (Page 11) potentially could serve as a mechanism to handle the PTech scope, with the addition of the 'routine codes and standards' or codification to pre-engineered (design guide) solutions using the preamble or limitation or exclusion parameters.

To this end, it tested one existing scope from a pilot that was run for technologists providing electrical engineering services for buildings:

# **Current Scope Wording**

<u>Licensee B</u> has signed an undertaking and is therefore authorized to engage in the practice of Professional Engineering in the Province of British Columbia, within the limited scope as specified hereunder:

Electrical design services for buildings for the following areas of practice: fire protection, building management, lighting, security, communications & alarms, emergency power, power distribution, power supply, audio visual systems and furniture systems; limited to the application of prescriptive codes and standards where the detailed engineering has been carried out and a professional engineer has certified that the codes and standards used are prescriptive.

The scope limitations to be indicated on the overleaf of your certificate are as follows:

- The Limited Licensee (Eng.L.) is restricted to working at levels 25 kV and under.
- This scope does not apply to design services for industrial processes and industrial controls.
- The Limited Licensee (Eng.L.) must identify the specific section of the prescriptive code or standard being used.
- The application of prescriptive codes or standards by the Limited Licensee (Eng.L.) is limited to situations where the Limited Licensee (Eng.L.) does not have to apply interpretive analysis in the application of the appropriate prescriptive code or standard used and documented.

"Prescriptive" - means that the original, detailed engineering has been carried out, the resulting design requirements are presented in the relevant referenced code or standard and the limits to the application of the prescriptive code or standard are identified.

"Codes or Standards" - includes published documents from recognized industry groups, standards associations, technical committees, federal agencies or departments, provincial agencies or departments, municipalities (often in the form of design standards referenced in bylaws) as well as documents which are not formally published such as those developed and sealed by a professional engineer for use by the specific corporate entity for which they were developed. All of the above must be in conformance with generally accepted engineering principles .The application of an appropriate prescriptive code or standard to one component of a technical function carried out by the Limited Licensee (Eng.L.) does not permit the Limited Licensee (Eng.L.) to complete other components of the technical function if there are not the appropriate prescriptive codes or standards in place which can be referenced.

"Building"-as defined in the BC Building Code.



### CURRENT VS NEW FORMAT SCOPE COMPARISON

Current Scope	New Format Scope
(see previous page)	<u>Licensee B</u> has signed an undertaking and is therefore authorized to engage in the practice of Professional Engineering in the Province of British Columbia, in accordance with the application of prescriptive codes and standards and/or pre-engineered design aids, and within the limited scope as specified hereunder:
	Discipline: Electrical Engineering
	Field of Practice: Building Services
	<ul> <li>Applications of 25 kV or under</li> <li>Situations where the Licensee does not have to apply interpretive analysis in the application of the appropriate prescriptive code or standard used and documented.</li> </ul>
	Exclusion:  • Design services for industrial processes and industrial controls.
	Definitions:  "Prescriptive Codes & Standards"  includes published documents from recognized industry groups, standards associations, technical committees, federal agencies or departments, provincial agencies or departments, municipalities (often in the form of design standards referenced in bylaws where the original detailed engineering has been carried out) and a professional engineer has certified that the codes and standards used are prescriptive. The application of an appropriate prescriptive code or standard to one component of a technical function carried out by the Licensee does not permit the Licensee to complete other components of the technical function if there are not the appropriate prescriptive codes or standards in place which can be referenced.  "Design Aids"  includes documents which are not formally published, such as those developed and sealed by a professional engineer for use by the specific corporate entity for which they were developed.  "Building"  as defined in the BC Building Code

Recommendation 7 that the APEGBC and ASTTBC Councils consider the P.Tech. scope structure as a possible complement to the Limited Licence revised scope structure.

#### DIFFERENTIATION BETWEEN LIMITED LICENCE AND P.TECH.

To fulfill its deliverable to, 'consider the relevant experience across Canada', the Limited Licence Renewal Task Force considered the challenges reported by APEGGA in differentiating between the Professional Licensee and the P.Tech.

Applicants for the Alberta P.Tech. will apply for individualized scopes tailored to their academic background and experience and that is the <u>routine application</u> of <u>industry recognized codes</u>, <u>standards</u>, <u>procedures and practices</u> using <u>established engineering or applied</u> <u>science principles and methods of problem solving</u>.

APEGGA reported that there is a conceptual demarcation that Professional Licensees can practice more novel engineering or geoscience than the more routine practice of a P.Tech, but that the APEGGA/ASET Joint Board of Examiners has been struggling with the difference between P.Tech. and P.L. (Professional Licensee) and how it will define the underlined terms above.

The Task Force explored this challenge with the ASTTBC/APEGBC P.Tech. Task Force when the two groups met to discuss whether Limited Licence could handle P.Tech.-type scopes in B.C..

The Task Force feels that clarity to the public, the membership, licence holders and Authorities Having Jurisdiction is key in developing vehicles for limited independent practice of professional engineering and geoscience in B.C..

Recommendation 7a that the APEGBC and ASTTBC Councils consider the merits of two limited scope licences versus one with respect to clarity to the public, memberships and Authorities Having Jurisdiction.

## **ACKNOWLEDGEMENT**

The Task Force wishes to acknowledge the assistance and contributions of the staff of APEGBC, APEGGA & ASTTBC and respondents to the two surveys, without which it would not have been able to accomplish its work.

Recommendation 8 that a copy of this report be sent to the Subject Matter Experts and Stakeholders who advised the Task Force and responded to its surveys.

# **BACKGROUND MATERIAL**

Background material used by the Task Force as reference for its work:

### **INCLUDED IN THE APPENDICES**

- Appendix A APEGBC/ASTTBC Limited Licence Renewal Task Force Terms of Reference
- Appendix B Limited Licence and Technologist Practice Legislation Cross Canada Scan
- Appendix C Sample Approved Defined Scopes of Practice BC, AB, ON
- Appendix D ASTTBC Limited Licence Informal Survey Results December 2010
- Appendix E January 2011 Survey Results All Limited Licensees
- Appendix F Responses To Information Release
- Appendix G Briefing Note on Bridging from Eng.L./Geo.L. to P.Eng./P.Geo.

#### OTHER BACKGROUND MATERIAL

# **Available on Request**

- ASTTBC/APEGBC PTech Task Force Terms of Reference
- Information Release on Limited Licence Renewal Task Force and PTech Task Force December
   2010
- Limited Licence Task Force Report to Council September 8, 2006
- Report to APEGBC Registration Committee and APEGGA Board of Examiners Re: Facilitating
   Mobility under AIT, TILMA and NWPTA Trade Agreements October 31, 2010
- APEGGA/APEGBC Memorandum of Agreement Towards Mobility of Professional Licences:
   APEGBC Limited Licence and APEGGA Professional Licensee December 17, 2010
- APEGGA and ASET Web Pages explaining Professional Licensee and PTech designations
- APEGBC Limited Licence Scopes of Practice by Discipline and Area of Practice
- Limited Licence Scope Evaluation Flowchart August 2006
- APEGBC Guide to Determining a Scope of Practice
- Limited Licence Undertaking
- APEGBC Web Pages related to Limited Licence



# APPENDIX A – APEGBC/ASTTBC LIMITED LICENCE RENEWAL TASK FORCE TERMS OF REFERENCE

# TERMS OF REFERENCE (FINAL October 25, 2010)

 7 11 2 2 2 4 7 10 1 1 2 2 2 11 11 10 10 10 10 11 10 11 10 11 10 10

**Type:** Advisory Task Force reporting to ASTTBC and APEGBC Councils

**Purpose:** 

Name:

To advise the ASTTBC and APEGBC Councils on an improved and

APEGRC/ASTTRC Limited Licence Renewal Task Force

more effective Limited Licence system

**Function/Deliverables:** 1) Review and consider the Report of the APEGBC Limited

Licence Task Force dated Sept. 2006

2) Review the current experience in BC and summarize what

works well and what needs improvement

3) Review the relevant experience across Canada including processes, designations, scopes of practice and legislative

framework

4) Develop and recommend refinements to the Limited Licence

system in BC

5) The work of the Task Force will consider, but not address, the Professional Technologist registration and scope of practice as this is within the mandate of another Task Force appointed by

the two associations.

Authority/Budget: \$2500 for meals and travel.

**Membership:** Seven appointees, with three members appointed by each

Association and one lay person or member of either association appointed by agreement of the Councils who will serve as Chair. The membership shall include one limited licensee practicing alone and a limited licensee and professional engineer practicing in organizations that employ both. The Task Force may also call upon subject matter experts or technologists who belong to

neither association for input and advice.

Accountability:

The Task Force members are appointed by their respective

Councils and the Task Force reports to both Councils.

**Term of Office:** Appointments will endure until recommendations have been

submitted.

**Selection of Officers:** 

The Chair will be appointed by agreement of the Councils.

Quorum: 50%

**Frequency of Meetings:** Meetings at the call of the Chair.

**Timeline:** Approval of TOR-October, 2010

# Recommendations to the two Councils March 2011

**Conduct of Meetings:** The Task Force may meet in person and/or by telephone

conference, webcast or other electronic communications media where all members may simultaneously hear each other and

participate during the meeting.

The Task Force may also meet by fax, e-mail or other electronic media where communication may not be simultaneous, provided

all members of the Task Force have access to the medium chosen and all communication to and from one member is

broadcast to all other members of the Task Force.

APPROVED BY APEGBC COUNCIL, December 17, 2010 (CO-11-22) APPROVED BY ASTTBC COUNCIL, October 26, 2010

# APPENDIX B – LIMITED LICENCE AND TECHNOLOGIST PRACTICE LEGISLATION – CROSS CANADA SCAN

Limited Licence and Technologist Practice Legislation - Cross-Canada Scan December 28, 2010

	Yukon	British Columbia	Albe	erta	Saskatchewan	Manitoba	Ontario (Eng)		Ontario (Geo)
Name of Licence(s)	Limited Licence	Limited Licence	Professional Licensee	Professional Technologist (members of The Association of Science and Engineering Technology Professionals of Alberta (ASET); will be jointly regulated by APEGGA and ASET and will have their admission qualifications evaluated by the APEGGA/ASET Joint Board of Examiners)	Limited Member	"specified scope of practice licence"; (« permis d'exercice limité ») (In Act but not implemented - No Requirements in Bylaws)	Limited Licence/ Limited Engineering Licensee/titulaire de permis restreint d'ingénieur	Licensed Engineering Technologist/ technologue en ingénierie titulaire de permis" (Act: October 25, 2010; Regulations under development))	Limited Member/ Limited Certificate of Registration
Designation(s)	L.L.(Eng)	Eng.L., Geo.L.	P.Lic.	P.Tech.	Limited Member (Engineering) Limited Member (Geoscience)	tbd	LEL/PRI	LET/TITP	P.Geo. (Limited) or "G.P. (membre restreint)"

	Yukon	British Columbia	Albo	erta	Saskatchewan	Manitoba		Ontario (Eng)	
Legislation	Engineering Profession Act& Regulations (by Council)	Act 10(1) Council may pass, alter and amend bylaws for: the establishment and monitoring of compliance with standards of training and experience required for licensees, and the enrolment and qualifications for a limited licensee, including limited licences for applied science technologists;  Bylaw 11(g) sets out requirements	Professional Licensee Engineering and G eoscientific Professions Act Part 7,	P.Tech. Engineering and G eoscientific Professions Act Part 8, Division 3 Professional Technologist Regulation http://www.apegga .org/About/ACT/pd f/ProfTechRegulati ons2010.pdf	Engineering and Geoscience Professions Regulatory Bylaws "under any terms and conditions that the Council may determine"	Engineering and Geoscientific Professions Act	Limited Licence Professional Engineers Act & Regulation 941, Amended to O. Reg. 692/00, Section 45 and 46	Licensed Engineering Technologist Professional Engineers Act 7.1 Council may make regulations respecting the establishment of an engineering technologist class of limited licence, including prescribing requirements and qualifications for the issuance of an engineering technologist class of limited licence and terms and conditions that shall apply to the engineering technologist class of limited licence	Professional Geoscientists Act & Regulations

	Yukon	British Columbia	A	lberta	Saskatchewan	Manitoba		ario ng)	Ontario (Geo)
Independent Practice?	Yes – within scope of licence	Yes - within scope of licence	Professional Licensee Yes – within scope of licence if sole practitioner, needs Permit to Practice	P.Tech. Yes – within scope of licence - if sole practitioner, needs Permit to Practice	Yes – within scope of licence - if sole practitioner, needs Permit to Practice	?	Limited Licence No - limited licence applicants must be employees of a company. If the employer wishes to offer engineering services to the public, the employer must be a Certificate of Authorization holder (i.e. have at least one Ontario-licensed P.Eng. on staff).	Licensed Engineering Technologist Proposed Regulation: Yes, within scope of licence – needs but must also work under a Certificate of Authorization (CofA):	the holder must  (a) provide only those services specified in the certificate;  (b) not provide services except as an employee of the employer named in the certificate;  (c) notify the Registrar immediately if he or she ceases to be employed by the named employer and return his or her certificate and the seal issued to him or her;  (d) be supervised by a practising member or temporary member;  (e) not issue a final drawing, specification, plan, report or other document unless the supervising practising member or temporary member has signed and dated it and affixed his or her seal to it

	Yukon	British Columbia	A	lberta	Saskatchewan	Manitoba		ario ng)	Ontario (Geo)
Scope	Regulation 20(a) practise engineering in the Yukon Territory only within the specific area of practice described in the limited license,	permits a person to practise professional engineering or professional geoscience within the scope specified in the limited licence	Professional Licensee the right to independently practice engineering, Geology or geophysics within a defined individualized scope of practice as specified by the APEGGA Board of Examiners.	P.Tech. the right to independently practice engineering, Geology or geophysics within a scope of practice that is the routine application of industry recognized codes, standards, procedures and practices using established engineering or applied science principles and methods of problem solving as specified by the APEGGA/ASET Joint Board of Examiners.	specified scope of practice that is the routine application of industry recognized codes, standards, procedures and practices using established engineering or applied science principles and methods of problem solving as specified by the ASET/APEGGA Joint Board of Examiners.	means the certificate issued under the seal of the association to a natural person certifying that the holder has been licensed to practice professional engineering or professional geoscience within the scope, and subject to the restrictions, specified in the specified scope of practice	Limited Licence Practice of professional engineering within: - definition of limitation statement	Licensed Engineering Technologist Practice of professional engineering within: - definition of limitation statement	Practice of professional Geoscience under supervision within a limited scope
Citizenship		n/a	n/a	n/a	n/a	?	must be a Canadian citizen or a permanent resident of Canada	Proposed Regulation: must be a Canadian citizen or a permanent resident of Canada	n/a

	Yukon	British Columbia	A	lberta	Saskatchewan	Manitoba	Ont (Ei		Ontario (Geo)
Requirement	(Regulation 8)  (a) a science degree in a discipline and from a university program approved by the Board or Examiners; or (b) registration as an applied science technologist with a degree or diploma in engineering technology from an institution approved by the Board or Examiners; or (c) other academic qualifications acceptable to the Board or Examiners	(i) has a science degree in a discipline and from a university program approved by the council; or (ii) is registered as an applied science technologist and has a degree or diploma in engineering technology or geoscience technology from an institution approved by the council in a program approved by the council; or (iii) has other qualifications acceptable to the council; and (iv) has completed any exams required by council; and	Professional Licensee Have at least 2 years of post- secondary education acceptable to the APEGGA Board of Examiners in areas that relate to the practice of engineering, Geology or geophysics;	P.Tech. at least 2 years of post-secondary education acceptable to the Joint Board of Examiners in areas that relate to engineering, Geology or geophysics;	1.Four-year science degree from a university program acceptable to Council; or  2. Degree or diploma in engineering or geoscience technology from a program acceptable to Council. The program must be of at least two years duration; or  3. Other educational preparation (minimum requirement high school completion)	tbd	Limited Licence A three-year diploma in engineering technology or a Bachelor of Technology degree in engineering technology from an institution approved by the Council. ii. A four-year honours science degree in a discipline and from a university approved by the Council. iii. Academic qualifications accepted by the Council as equivalent to a diploma or degree mentioned in subparagraph i or ii.	Licensed Engineering Technologist Proposed Regulation: Same as for Limited Licence (must be Certified Engineering Technologist – OACETT)	

	Yukon	British Columbia	A	lberta	Saskatchewan	Manitoba	Onta (Er		Ontario (Geo)
Experience Requirement	8 years of experience carrying out engineering work satisfactory to the Board of Examiners at least 2 of which shall have been in the area to which the limited license is to apply	8 years of experience in engineering or geoscience work satisfactory to the council, the 8 years to include the years spent in obtaining the post-secondary academic trainingat least the last 2 years of the experience within the practice of professional engineering or professional geoscience to which the limited licence is to apply	Have at least 6 years of experience in work of an engineering, Geological or geophysical nature that is acceptable to the APEGGA Board of Examiners, at least two of which are in the defined scope of practice and which were completed under the supervision and control of a Professional Member, and at least one year of your experience must be equivalent Canadian experience;	at least 6 years of experience in areas that relate to engineering, Geology or geophysics that is acceptable to the Joint Board of Examiners, at least 2 years of which are in the applicant's proposed area and scope of practice and were completed under the supervision and control of a professional member	All qualifying experience must be directly related to the scope of work to be identified in the restricted licence and performed under the direction of a Professional Engineer or Professional Geoscientist  Refer to Education number references above: 1.(degree) Minimum five years post-degree experience 2.(diploma)Minimum eight years post-degree or diploma experience 3. (high school) Minimum 15 years of combined post-high school education and experience acceptable to Council Plus: one-year probationary period, during which the applicant will be required to report regularly to APEGS on ongoing work experience. In addition, APEGS will reserve the right to monitor and investigate the applicant's practice during the probationary period by whatever means it deems appropriate including interviews with the applicant, clients, superiors, and fellow workers, visits to the applicant's work site, and examination of drawings, designs, specifications, job files, and any other items considered relevant to the applicant's ability to function as a Limited Member of APEGS.	tbd	13 years of experience in engineering work acceptable to the Council     including the years spent in obtaining the post-secondary academic training     at least 1 year of such experience under the supervision and direction of a person authorized to practice professional engineering in the province or territory in Canada in which the experience was acquired     at least the last 2 years of the experience in the services within the practice of professional engineering with respect to which the limited licence is to apply.     at least the last year of the experience referred to in paragraph 2 must have been with the present employer	Proposed Regulation:  11 years, including post-secondary education,  with at least 6 years of this experience being relevant experience [within the defined scope of practice] at least 4 of which are services within the practice of professional engineering with respect to which the licence is to apply under the direct supervision of a professional engineer, with references from three professional engineers, all satisfactory to PEO.	

	Yukon	British	Al	berta	Saskatchewan	Manitoba	Ont	ario	Ontario
		Columbia					(Eng)		(Geo)
Practice, Law & Ethics Requirement	knowledge of the Act, practise of the profession and these Regulations including the Code of Ethics in Schedule A demonstrated by passing one or more examinations set by the Board or Examiners	Successful Completion of Professional Practice Examination and law & Ethics Seminar	Demonstrate knowledge of law, ethics and professionalism by passing the National Professional Practice Examination;	has a knowledge of the Act and the regulations under the Act, and general knowledge related to the proposed scope of practice of engineering, Geology or geophysics, which has been demonstrated by passing an examination for those purposes that is prescribed by the Joint Board of Examiners	Successful Completion of Professional Practice Examination and law & Ethics Seminar		Successful completion of the Professional Practice Examination	?? Successful completion of the Professional Practice Examination	Successful completion of the Professional Practice Examination

	Yukon	British Columbia	A	lberta	Saskatchewan	Manitoba		tario Eng)	Ontario (Geo)
Other	Good Character; English Language Competency	Good Character; English Language Competency	Good Character; English Language Competency Mobility Provision:an applicant is entitled to be registered as a professional licensee if (a) the applicant is of good character and reputation, and (b) the applicant is registered as a professional licensee or in an equivalent capacity in good standing with a regulated entity in another province that, in the opinion of the Board of Examiners, is equivalent to the Association.	Good Character; English Language Competency Mobility Provision: an applicant is entitled to be registered as a professional technologist a) if the applicant is of good character and reputation, and (b) is a professional technologist who, in respect of another province, (i) is eligible to engage in the practice of engineering, Geology or geophysics within the scope of practice specified by the Joint Board of Examiners, and (ii) is a member in good standing with a regulated entity in that other province that, in the opinion of the Joint Board of Examiners, is equivalent to ASET.	Good Character; English Language Competency	tbd	Good Character; English Language Competency	Good Character; English Language Competency	

# APPENDIX C - SAMPLE APPROVED DEFINED SCOPES OF PRACTICE - BC, AB, ON

Sample Approved Defined Scopes of Practice – BC, AB, ON						
APEGBC Limited LIcence	APEGGA Professional Licensee	PEO Limited Licence				
	http://www.apegga.org/image	http://www.oacett.org/download				
	s/pdf icon.gif	s/get certified/let/Appendix%20				
		<u>B%20-%20LL%20-</u>				
		%20Scopes%20of%20Engineerin				
		g%20Practice.pdf				
Electrical - Lighting						
Provide consulting services, reports, detailed	Designing of electrical distribution	The design of outdoor lighting				
designs, construction inspection, project	and street lighting systems.	systems including roadway lighting				
management and contract administration services	Managing and directing the	and the design of traffic systems.				
limited to electrical systems (600 Volt supply	construction and maintenance of					
services or less) for aerodrome lighting and	electrical transmission,					
navigational systems, roadway lighting systems	distribution, and street lighting					
and traffic signals.	facilities.					
<u>Limitations and Exclusions</u>						
All systems specified by the applicant to be 600						
Volt supply services or less.						
<ul> <li>Hydro services specified by the applicant to be</li> </ul>						
secondary services only.						
<ul> <li>Only generator systems associated with</li> </ul>						
Aerodrome Lighting to be specified by the						
applicant.						
Mechanical Building Systems						
Mechanical design of HVAC, plumbing, sprinkler	Design, reporting on and					
system fire protection, and piped building	commissioning of mechanical					
services.	systems for institutional, industrial,					
Exclusions:	commercial and residential					
Water, oil or gas over 150 psi	buildings (HVAC, plumbing					
-	systems, medical gas systems, fire					

Sample Approved Defined Scopes of Practice – BC, AB, ON  APEGBC Limited Licence APEGGA Professional Licensee PEO Limited Licence						
APEGBC Limited Licence	http://www.apegga.org/image	http://www.oacett.org/downloa				
	s/pdf icon.gif	s/get certified/let/Appendix%2				
	<u>s/pur-icon.gn</u>	B%20-%20LL%20-				
		%20Scopes%20of%20Engineeri				
		g%20Practice.pdf				
• Charman 450 mi	sprinkler and hose standpipe	g///2011uctice.pur				
• Steam over 150 psi	systems and on-site services).					
<ul> <li>Industrial systems and industrial process piping</li> </ul>	systems and on-site services.					
• The design of systems governed by the Boiler						
and Pressure Vessel Safety Act.						
For Fire protection, the water supply must be						
capable of meeting the suppression system						
demands without the use of a booster pump.						
Civil Municipal						
Civil Municipal	Name since was autima and discoting	Advising repositing designing and				
Professional Engineering within the civil discipline,	Managing, reporting and directing	Advising, reporting, designing, and				
limited to: provision of civil infrastructure (roads	the development, construction,	construction supervision associated				
and services) required for development of	maintenance and operation of	with municipal roads and storm				
residential, light commercial and industrial areas,	civil/municipal engineering works.	drainage works.				
all in accordance with standard municipal	Design of earthwork, urban and					
requirements, with the following limitations:	rural roadway improvements,					
	water supply, treatment and					
<ol> <li>The design of urban roads, parking lots,</li> </ol>	distribution systems, wastewater					
storm and sanitary gravity sewers, sanitary	collection, treatment and disposal					
forcemains, watermains, site grading, and	systems.					
stormwater detention and siltation control						
facilities, all in accordance with standard						

Sample Approved D	Sample Approved Defined Scopes of Practice – BC, AB, ON					
APEGBC Limited Licence	APEGGA Professional Licensee	PEO Limited Licence				
	http://www.apegga.org/image	http://www.oacett.org/download				
	<u>s/pdf_icon.gif</u>	s/get_certified/let/Appendix%20				
		<u>B%20-%20LL%20-</u>				
		%20Scopes%20of%20Engineerin				
		g%20Practice.pdf				
design criteria commonly prescribed in						
standard municipal requirements.						
2. Conceptual design and performance						
requirements for sanitary pump stations, as						
necessary for the provision of detailed design						
drawings and specifications typically						
provided by the appropriate equipment						
suppliers, all in accordance with standard municipal requirements.						
3. Issuance of technical specifications and						
contract documents as necessary for the						
tendering and construction of the above						
described infrastructure.						
4. Administration of construction contracts for						
the above described infrastructure, including						
monitoring of construction for adherence to						
the contract documents.						
Plantical Community of Division						
Electrical Generation & Distribution	B ii lii					
Design and review protection and control	Reporting on, advising on,					
systems and associated electrical equipment	evaluating, designing, preparing					
for electrical generation plants and related	plans and specifications for, or					

Sample Approved Defined Scopes of Practice – BC, AB, ON				
APEGBC Limited LIcence	APEGGA Professional Licensee <a href="http://www.apegga.org/image">http://www.apegga.org/image</a> <a href="mailto:s/pdf">s/pdf</a> icon.gif	PEO Limited Licence http://www.oacett.org/download s/get_certified/let/Appendix%20 B%20-%20LL%20- %20Scopes%20of%20Engineerin		
service buildings; direct and approve the construction, commissioning, and maintenance of same equipment. All work must comply with applicable codes and standards and adhere to accepted engineering practice.  With the following limitations:  Limited to protection and control systems and associated electrical equipment within the field of electrical power generation. The maximum individual generator size shall be limited to 550 MVA and the maximum system voltage under which the protection and control systems operate shall be limited to 500 KV.	directing the construction, technical inspection, repair, maintenance and operation, of electrical equipment, protection, control and distribution systems.	g%20Practice.pdf		

# APPENDIX D – ASTTBC LIMITED LICENCE INFORMAL SURVEY RESULTS - DECEMBER 2010

#### **Application Process**

- 1. My application was over 15 years ago, so I'm sure it has changed
- 2. The application process was fairly simple back at the beginning. What I found incredibly difficult was the review process and timing. The first application required about a year to process. The second application required 3 years plus to process through multiple rejections by APEGBC, changing staff positions, changing reviewers and lost applications. It could be appropriate to have a central process in which the application is handled jointly and information shared in a collaborative process, and the applicant is part of the process, rather than being kept in the dark.
- 3. New process so it was a learn as you go for me and the association. Perhaps the "scope" of practice is clearer now but at the time, I really didn't know where we were going.
- 4. From talking with AScT members asking about obtaining a Limited Licence, I think the biggest hurdle for them not applying is gathering all the information required to satisfy the application submission (especially if the applicant wasn't anticipating applying for a Limited Licence). However, I believe the requirements are necessary to ensure the applicant has the experience required to meet the criteria for a Limited Licence.
- 5. When I applied in the mid 1990's it took almost 2 years to have the application completed. I expect that the process has been streamlined since then. Although my colleagues who are interested in getting their Limited Licence appear to shy away when they review the application procedures. Many show interest but none follow through.
- 6. This was rather extended, about 18 months as I recall.
- 7. From application submission to receiving my licence took 14 months, so it was not a streamlined process
- 8. The application process was long and drawn out, but at the time I was one of early applicants. One interesting part of the application was that you had to list work and projects where demonstrated that you were practicing engineering. If you were in fact practicing engineering, you would be in violation of the Engineering Act.

#### **Interview Process**

- 1. My application was over 15 years ago, so I'm sure it has changed
- 2. The interview process the first go round was fairly simple and did not result in any surprises. The second interview for amendment last year was held at APEGBC offices with two interviewers, and was interactive and effective. This interview was in part due to my insistence on working with the interviewers to agree on a scope, any revisions required, and to walk away with an agreement in principal. This was critical to the success, because at this point, it was agreed we were moving forward with a Limited License of some applicable wording.
- 3. Panel Review:
  - Hell..Spanish inquisition...there were no terms of reference for the interview. I felt like I was being attacked. I the approach was not to elicit the expertise of the applicant but to find deficiencies to exploit. It actually go to the point where I said, "If you need to be an expert to get an LL, we may as well end the interview now. I do not claim to be an expert in the field. I do not believe most P.Engs are expert in their respective discipline but they are expected to practice at a competent professional level. I believe I practice at a competent professional level commensurate with that expected of a P.Engs." I think at that point the panel realized how aggressive they were becoming. The rest of the interview went fine.
  - The on-site interview was fine. The interviewer actually knew me well, was familiar with the work of our agency and was familiar with my work.
- 4. From what I can remember the initial meeting was somewhat general. I had numerous samples of my design drawings everything from a townhouse site to a 100+ single family subdivision but the interview didn't go into too much detail on the design philosophy. The second peer review

meeting at the APEG office was more comprehensive asking specific questions on design which I believe is essential.

- 5. I did not find the interview process to be any problem.
- 6. Quite pleasant, the engineer who conducted the interview handled the whole thing with little pressure.
- 7. The interviewer was in the office for better part of a day. He was congenial and made the interview a not-unpleasant experience.
- 8. The initial interview was carried out by a staff member, a general mechanical engineer and two fire protection engineers. As I understand it, this interview was to determine the suitability of the applicant for a limited license. I know one of the fire protection engineers as part of the BC fire protection community and the other fire protection engineer was working for me as a contract Engineer of Record. There were no issues with the face to face interview. After the interview, the interview team had to review and modify the scope of practice. The resulting changes to the scope of practice by the interview team resulted in a scope of practice that was not workable and very limited.

At the onsite interview, a different local fire protection engineer carried out this interview to review the suitability of the applicant's access to codes & standards, filing system, design review process and to also review the revised scope. As a result of the review of the revised scope, the interviewer also agreed that the revised scope statement was unworkable and very limited. As a result I worked with the interviewer to rework the scope statement to something that was mutually agreeable. This was subsequently final revision to the scope statement approved by APEGBC.

The practice review was initially costly, but because of the short amount of time used, part of the fee was returned. The interview for the practice review was also a retired building code engineer who had no working connection or possible conflict with the person that was being interviewed.

#### Scope of Practice, its determination and subsequent modification

- 1. APEGBC was very strict on the scope. I had to prove I was an expert in the scope of practice.
- 2. My first scope was a moment of elation, and years of frustration. Poor and inconsistent wording led to interpretations, which cause further confusion. The lack of guidelines on interpretation also resulted in frustration to the point, that I was in a disciplinary review, which resulted in the recommendation of no wrongdoing, but a new scope to correct the inconsistencies. The effort to seek a new licence wording resulted in 3 review panels rejecting the wording with a recommendation to restart the process. I was excluded from the process and wasted much time, as well as resources at APEGBC to restart the process, and finally end up in a meeting to review and rework as scope acceptable to all.
  - The idea of a private process is inadequate. The only way to have information returned was through Freedom of Information requests, causing a lot of consternation. This process requires participation by the application in conjunction with the association at all steps.
- 3. There really wasn't a lot of back and forth. My purpose for getting the LL was to keep my job as it was a condition of hire. No one really cared what the scope actually said. I actually think defining the scope is really more problematic that it is worth. With any other member of APEG it is up to the individual to self assess their own scope and not work outside of it subject to disciplinary actions. Really, I don't see why the same responsibility can not be placed on Licensees. The assessment should consider the licensees ability to recognize their own limitations. After all the process to get an LL really only attracts the best candidates.
- 4. I think the process of determining the limitations was reasonable. I understand the Associations concern with being too general and wanting the limitations being specific.
- 5. I was the first to apply in xxx engineering and I received a very broad licence. I understand that they are much more restrictive now. I think a Licence should be as broad as your demonstrated experience allows.
- 6. This was, perhaps, the only area I would like to have modified. I didn't take sufficient care in

reviewing a small part of the scope writen by my interviewer. This has caused problems over the years, but seems to have been too complicated to revise.

I do think that, having subscibed to the Code of Ethics where I undertake not to practice in any area with which I am not experienced, that the Scope of Practice is rather superfluous.

- 7. Not having a template to work from, I made my scope of practice into a rather lengthy description. That resulted in a fairly verbose description having to be attached to anything I signed. Afterwards it was my understanding that revising the description could result in another review process, so I left it as-is.
- 8. The scope of practice is the most critical issue, since its determination defines the license. As noted in item 2 above, there appeared to be direction from APEGBC to make the scopes of practice very limited.

The whole concept of the scope of practice is a difficult issue to frame. While my scope is very broad related to only electrical generating plants and substations, other are restricted in the size of building that fire protection can be designed for.

Richard Froese had the first LL in fire protection but his scope was so restricted that he gave to up. He was able to obtain an Alberta LL scope that was broad and workable.

In my opinion the restriction on scope are not about the person's ability or education but the drive restrict the LL effectiveness.

During a previous task force meeting I asked about the scope limitations and got an interesting reply. My scope covers substation, generating plant and service building fire protection. If asked what type of fire extinguisher should be used in an electrical room in one of our office buildings, I was told that since it was outside my scope, I <u>must</u> not answer the question since it would violate my scope. I am instead to refer it to an engineer or in the long term I am to have my scope adjusted. I suggested typical requests like this were not engineering, but was advised that since I am an Eng.L. I have to accept these restrictions. As Eng.L.s we can apply our seal which may or may not accepted by the authority having jurisdiction on the plus side, but I also must not answer simple fire protection related requests due to the scope restrictions????!!

The whole area of the interpretation of scope statements is an area that APEGBC has not realistically considered. Is it going to be all about after the fact negative interpretations?

#### Stamp and communication of L.Eng. status

- 1. Good
- No problems here other that dealing with governing agencies on their lack of understanding.
  The L.Eng. status falls outside of understanding, hence the backup plan of government is do
  nothing. This can create further delays. Also wording of the scope can create the need for
  clarification, and without an informed representation at APEGBC can cause misinformation to be
  provided.
- 3. Never used it. There really is no communication on L.Eng. status. And what little there is, seems to still treat it as sub-standard. However, I really can't give you a concrete example of this, so maybe my viewpoint is misplaced.
- 4. Would prefer to have a similar (circular) stamp because we are reasonable for the design just as if we were a Professional Engineers but again I understand the Associations desire to distinguish between a P. Eng. and a Eng.L. What I have found is even some engineers do not know what the Eng.L. designation is, which is unfortunate.
- 5. The designation is Eng. L. not L. Eng. The original issued stamp was way too large. They have since corrected that. The stamp is now being accepted by most organizations. Although there are a few that still question its use. (BC Hydro for one).
- 6. When I applied for my Licence, the actual name to be used was under discussion and took some time to be resolved.
  - The initial stamp that was issued by APEGBC was too large to fit the Building Code forms to which it had to be applied! This has since been corrected.
- 8. The last task force did some good work in the area. I think that based on xxx's problems with the yyy, they have to take positive steps to change references in codes or to provide a clarification in the Engineering Act that the term Professional Engineer means a limited

licensee.

#### Costs – application, annual and practice review

- 1. Not applicable as my company paid the total costs.
- 2. Costs are generally not an issue, except when the cost is associated with purportedly paying a volunteer. However, it is a privilege to be provided a Limited License, so I do understand we have to bare some of the costs. I have yet to go through an annual or practice review due to the process involved in me re-scoping. However, my experiences would suggest that a greater level of openness and participation and cooperation are required.
- 3. Costs are probably fair...I believe it having to pay my way. Dual membership does allow for reduced ASTT fees which I appreciate. It would be nice if APEG also gave a little break as well. Practice review...haven't done it yet. It gives me a little anxiety give my first trial. I work with a lot of engineers that carry out the same function and job duties as I do, yet, whether or not they are practicing engineering and review of their scope never comes into question. I guess the higher level of scrutiny comes with the territory.
- 4. Reasonable
- 5. Although I have completed the mandatory practice review and found the experience acceptable and confirmed that my work was within the Licence issued. I do not think that it should be mandatory for all Eng. L's. at 5 years. P. Eng's are subject to a random selection and this should also be the case for Eng. L's. My employers have covered all of my costs associated with getting and retaining my Licence.
- 6. The total cost of the application was around \$ 2000.00. Licencees are the only class of members of APEGBC who have to pay the cost of Practice Review. The cost of the review was a little less than \$ 2000.00 but I think this is not fare.
- 7. The cost of the application was \$2,000; not a small sum. I have had one practice review which was fairly and professionally done, with some constructive comments at the outcome.
- 8. These are not a major issue.

#### Acceptance or not by others ... Please only cite specific examples

- 1. My employer accepted the Limited License and the fact that I could be a EOR. It has allowed me to progress through the management ranks. Without the licence, it would not have happened.
- 2. I have had many cases of the government asking for clarification as they are unwilling to interpret and rely on the exact wording and any difference is up to the individual to sort out.
- 3. I don't know that there really is any difference.
- 4. The xxxx of xxxxx accepts the Eng.L. designation as satisfying the P.Eng. requirement for "required" qualifications for job positions as well as sealing design drawings.
- 6. I live in a small town and had an extablished reputation before gaining my Licence I had no problem with acceptance.
  - Earlier on I spent some time educating clients and other authorities on what the L.Eng designation meant.
- 7. The Eng.L. designation has been universally accepted, without exception. I have not had any time where an authority has questioned the designation.
- 8. I have not had any issues with acceptance within BC Hydro or with clients in Canada, the US or Australia. It is also interesting to note that in the US and Australia there is not the focus of Professional Engineers. They are more impressed by experience and knowledge. Interestingly in work on fire protection for US nuclear power plants you do not have to be a registered professional engineer.
  - The issue appears to be that LLs are not recognized by all AHJs. This can be a result of the specific references to professionals in codes and standards do not cover LLs, APEGBC is not changing their act to cover LLs as recognized professionals, and the LL indication is not will recognized within the Engineering and building authorities communities.

#### **General recommendations to the ASTTC Team**

- 1. Is this something members are interested in? From my experience of observing others, it is a lot of work. Several potential L.Eng decided to go the full P.Eng route and in the end was a far better decision as there are more options.
- 2. It is important to understand that the Limited License is an important step in self-recognition of not only experience, but the ability to further the applied science beyond the routine technologist roll and one into grasping the professional liability that goes with the decision process. It is a great responsibility to be accepted as a L.Eng. as your efforts must typically be better than a P.Eng, and you recognize that you will be questioned at all turns. You are a representative of ASTTBC and all technologists so a high standard must be maintained for the integrity of ASTTBC and APEGBC, and as such, it is not a standard route of progression, but rather an opportunity for those who have demonstrated good practice and advanced skills in their work life.
- 3. I had hoped we would have amalgamated. I think it would have been better for all. I think having one foot in the door and one foot out, LLs will always remain as the cousin no one wants to talk about.
- 4. I believe the ASTTC Team has worked hard for their members and spend many hours of discussions with APEG for them to recognize the Limited Licence designation, which I appreciate as it allowed me to move forward in career opportunities.
- 5. Be more pro-active in encouraging ASTT members to apply for and accept responsibility for the work they do.
- 7. I wholeheartedly recommend those who qualify to obtain their Limited Licence. It has allowed me to better serve my clients, and to become more responsible for my work.

#### Suggestions to APEGBC on how better to serve the public interest through the Limited Licence

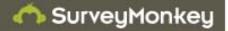
- 1. None
- 2. I do not believe it is up to APEGBC to serve the public interest insofar as the Limited Licence process. Rather, it is up to both associations working with those particular individuals to ensure a higher standard, and maintain an openness to working together.
- 3. We need to everyone embrace and remove barriers for personal development and opportunity. I don't think we can make APEG embrace the LL. This is something that they to recognize themselves...i.e. become inclusive versus exclusive.
- 4. It would be nice if members knew what the Eng.L. designation was. When I explain it to some engineers they recognize it is similar to "their" limitations as a P.Eng. it just isn't written down on what they are allowed to practice.
- 5. The system is working, both associations should be more pro-active in promoting this method of career development.
  - Licensees should be able to vote as full members of the Association. They play an important role in the engineering team.
- 6. Licencees presently have to become members of APEGBC. APEGBC needs to treat them as full members untill such time as ASTTBC obtains practice rights.
- 8. APEGBC has to come up with a policy on limits of scope statements. In the past the scopes statement have been so restrictive they are of low value. Alberta has allowed broad workable scopes. We have to push for workable scopes that are universally recognized.

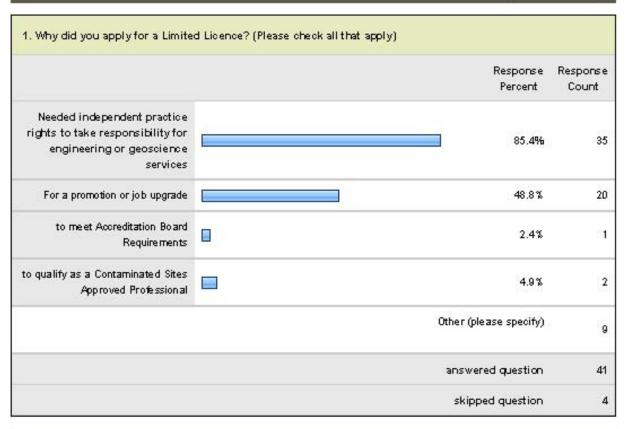
#### Other?

- 1. L.Engs are not members of APEGBC and have no voting, etc rights. We should have equal rights as a P.Eng as we have the same roles and responsibilities.
- 2. I would be more than willing to assist ASTTBC in any of this process or other committees they have as you move forward
- 3. Good luck blending my comments...but I do think they paint an accurate picture of my experience.
- 4. The opportunity for me to obtain a Limited Licence allowed me to be promoted to a Managerial position which would not have been the case with the ASCT designation.
- 5. Good luck in convincing the majority of APEGBC members that the team system will work and is here to stay. Employers where they have members from both association see the benefit but others do not. I for one xxxxxxxx a team of 95 staff where there were equal numbers of members from both APEGBC and ASTTBC.
- 6. Perhaps initial applicant screening by ASTTBC would help speed up the process and keep ASTTBC more in the picture.

# **APPENDIX E - JANUARY 2011 SURVEY RESULTS - ALL LIMITED LICENSEES**

# Limited Licence Survey Jan 2011 FINAL





	Response Percent	Response Count
Yes	84.4%	38
No	6.7%	3
Partially	# # # # # # # # # # # # # # # # # # #	2
	Comments (optional)	8
	answered question	45
	skipped question	c

ices?	3. Are you the only individual in your firm licensed to offer engineering or geoscience services?					
Response Resp Percent Co	- Control of the Cont					
34.1%	34.	Yes				
65.9%	65.5	No				
s (optional)	Comments (option					
d question	answered questi					
d question	skipped questi					

4. How long ago was your licence issued?				
	Response Percent	Response Count		
1 - 3 years ago	50.0%	22		
4 - 8 years ago	18.2%	8		
9 - 17 years ago	31.8%	14		
	answered question	44		
	skipped question	1		

5. Your Licence and Scope Wordin	g			
	Disagree	Neither Agree nor Disagree	Agree	Response Count
The scope of my licence, as granted, accurately reflects my competence today	20.5% (9)	18.2% (8)	61.4% (27)	44
The scope of my licence is easily understood by others	22.2% (10)	15.6% (7)	62.2% (28)	45
The scope of my licence has created problems for my practice	61.4% (27)	15.9% (7)	22.7% (10)	44
The wording of the scope of my licence should be less detailed and rely more on my professional judgment	13.3% (6)	28.9% (13)	57.8% (26)	45
In retrospect, I would have proposed a different scope wording for my licence	18.2% (8)	34.1% (15)	47.7% (21)	44
APEGBC should provide an inexpensive, expedited process for me to update the scope of my licence	0.0% (0)	26.7% (12)	73.3% (33)	45
			Comments (optional)	10
			answered question	45
			skipped question	0

6. Use of your Stamp and Licence Certificate				
	Never	Seldom	Regularly	Response Count
How often do you use your Limited Licence Stamp/Seal?	22.7% (10)	11.4% (5)	65.9% (29)	44
How often do you append your Licence Certificate to your work?	32.6% (14)	20.9% (9)	46.5% (20)	43
			Comments	17
			answered question	44
			skipped question	1

7. Do you feel that you receive appropriate recognition as an APEGBC Engineering or Geoscience Licentifrom:					
	Yes	No	Partially	Not Applicable	Response Count
Your Employer?	68.9% (31)	2.2% (1)	13.3% (6)	15.6% (7)	45
APEGBC?	60.0% (27)	20.0% (9)	17.8% (8)	2.2% (1)	45
B.C. Authorities Having Jurisdiction?	47.7% (21)	9.1% (4)	20.5% (9)	22.7% (10)	44
Your Peers?	66.7% (30)	4.4% (2)	26.7% (12)	2.2% (1)	45
			Co	omments (optional)	12
			ar	nswered question	45
				skipped question	0

8. Have you encountered, within the last 2 years, a refusal on the part of an Authority Having Jurisdiction, recognize your licence in a circumstance where you feel it should have been recognized?					
	Response Percent	Response Count			
Yes	17.8%	8			
No	60.0%	27			
Not Applicable	22.2%	10			
	Comments	8			
	answered question	45			
	skipped question	0			

9. Application Process and Practice Review				
	Disagree	Neither Agree nor Disagree	Agree	Response Count
The qualification requirements were easy to understand	18.2% (8)	25.0% (11)	56.8% (25)	44
The qualification requirements were appropriate	6.7% (3)	11.1% (5)	82.2% (37)	45
The qualification process was straightforward	35.6% (16)	22.2% (10)	42.2% (19)	45
The qualification process was respectful	8.9% (4)	20.0% (9)	71.1% (32)	45
The qualification process was too long	11.1% (5)	11.1% (5)	77.8% (35)	45
The cost of the qualification process was too high	22.7% (10)	36.4% (16)	40.9% (18)	44
Mandatory practice review of Limited Licence holders after 5 years of licensure is appropriate	33.3% (15)	33.3% (15)	33.3% (15)	45
The requirement for the Eng.L. or Geo.L. to pay for their first practice review is appropriate	71.1% (32)	13.3% (6)	15.6% (7)	45
			Comments	18
			answered question	45
			skipped question	0

#### 10. Program Enhancements

\* Membership Rights and Privileges equal to those held by P.Eng. and P.Geo. members include the ability to vote a) at the APEGBC AGM; b) in bylaw ballots; and c) in Council elections; and to run for a position on the APEGBC Council.

	Disagree	Neither Agree nor Disagree	Agree	Response Count
Engineering and Geoscience Licensees should have Membership Rights and Privileges* (see above) equal to those held by P.Eng. and P.Geo. members	4.4% (2)	13.3% (6)	82.2% (37)	45
APEGBC should promote the Limited Licence to employers	0.0% (0)	22.7% (10)	77.3% (34)	44
APEGBC should promote the value of Engineering and Geoscience Licensees to its members	0.0% (0)	17.8% (8)	82.2% (37)	45
APEGBC should promote the Limited Licence to Authorities Having Jurisdiction	2.2% (1)	13.3% (6)	84.4% (38)	45
APEGBC should facilitate bridging programs from Eng.L. or Geo.L. to P.Eng. or P.Geo.	2.2% (1)	20.0% (9)	77.8% (35)	45
			Comments (Optional)	13
			answered question	45
			skipped question	0

	Disagree	Neither Agree nor Disagree	Agree	Response Count
I would become more involved in APEGBC if I had Membership Rights and Privileges* (see above Question 10) equal to those held by APEGBC P.Eng. and P.Geo. members	9.1% (4)	43.2% (19)	47.7% (21)	44
I would become an APEGBC volunteer if asked	6.8% (3)	38.6% (17)	54.5% (24)	44
I would enter a bridging program to become a P.Eng. or P.Geo. if it were designed to accommodate employed licensees	15.6% (7)	26.7% (12)	57.8% (26)	45
I would recommend Limited Licence to a colleague now	6.7% (3)	24.4% (11)	68.9% (31)	45
l would recommend Limited Licence to a colleague if the features in Question 9 that I marked 'Disagree' were improved	4.5% (2)	50.0% (22)	45.5% (20)	44
I would recommend Limited Licence to a colleague if the features in Question 10 were added	6.8% (3)	38.6% (17)	54.5% (24)	44
			Comments (optional)	8
			answered question	45
			skipped question	C

12. Any other comments on Limited Licence?	
	Response Count
	14
answered question	14
skipped question	31

	Response Percent	Response Count
Your name	100.0%	1:
Your email address	91.7%	1
Issue I would like to have addressed	75.0%	,
	answered question	1
	skipped question	3

	Comments (optional)	
I.	I applied for a Limited License for software engineering, yet the license does not say software egnineering anywhere on it. I have asked the license review board to look at some proposed revisions. But it will be a couple of months before I hear the outcome	Jan 28, 2011 4:52 AM
2	Provided the opportunity to move into management in my field in the public sector	Jan 28, 2011 4:04 PM
3	Not yet I just got my license and I am working on moving into a new postion.  The job position requires that I become registered with APEGBC.	Jan 28, 2011 4:35 PM
1	Since I am now self-emplyed, there are no promotions!	Jan 28, 2011 4:46 PM
5	Work within my scope of practice continued to be done by unlicensed individuals. Therefore license had no value.	Jan 28, 2011 7:01 PM
5	It is not well promoted or explained to the authorities	Jan 28, 2011 10:53 PM
	The Licence granted is excessively restrictive and does not allow me to practise in the capacity required.	Jan 29, 2011 7:15 PM
3	Yes	Jan 31, 2011 6:07 PM

# 3. Are you the only individual in your firm licensed to offer engineering or Comments (optional) 1 under limited license program. We have other P.Eng.'s on staff as well. Jan 28, 2011 4:51 AM 2 At least in BC I am. Jan 28, 2011 4:52 AM 3 The only one in my office, however, there may be others within gov't with similar licence. 4 Prefer to have 100% professional office staff. right now we have 2-EIT and 1-PEng

## 5. Your Licence and Scope Wording

#### Comments (optional)

- There is one category of work that my scope of license was originally proposed to Jan 28, 2011 4:51 AM include (Certified Professional services) and this was excluded at the time the license was issued. Since then it has been difficult to move forward with this additional scope of practice.
- I understand that I am the first person to apply and acquire a Limited License with Jan 28, 2011 4:52 AM a scope of practice in Software Engineering. Unfortunately, the scope of the license barely says software in it and missing key activites like programming and quality assurance. Rather than using the word software, the license says systems. The fact that the license does not say software engineering activities anywhere in means that it is of little value to me today. As mentioned, I am hopeful that the licensing reviw board will approve my proposed changes. Otherwise I am out of pocket close to \$2000 to have obtained this. Microsoft is not reimbursing me for this. Finally, my colleagues look at the license and asks me what it is. When I explain, they say why does it not say software engineering then?:-(

10 of 18

	Comments (optional)	
3	Regardless of wording, there is always the issue of interpretation, which can cause unwarranted constraints or misunderstandings with respect to the word Limited, or wording, which is not consistent with Regulation.	Jan 28, 2011 5:44 AM
4	I developed quite a wordy scope which I do not believe now is necessary to describe my limitations. It is a large document that must appear on all materials that I certify.	Jan 28, 2011 4:03 PM
5	Just got my license so I cannot really comment on these items.	Jan 28, 2011 4:35 PM
6	strongly agree with the last point	Jan 28, 2011 6:03 PM
7	I chose to narrow of a wording. I chose my dicipline (mechanical) rather than what I do, design of petroleum facilities. I have ocassionally had problems where Bld'g permits have said others should do. i.e. backfilling of tanks. etc.	Jan 28, 2011 9:30 PM
8	Some times the attachements explaining the scope are viewed as disclaimer and warning by the others	Jan 28, 2011 10:53 PM
9	My scope is currently under review for revision	Jan 29, 2011 1:32 AM
10	as skills and training develop it would be nice to have a process that allows expansion of scope of practice. I find that current scope wording can become limiting. In my case, the "value" limitation has become an awkward restriction given the growth in project costs since license issuance.  I would prefer:  1) Perhaps a peer and/or professional development-based upgrade/ certification system.  2) If practical, perhaps professional judgment based on a general scope description.  3) A combination of both 1 and 2	Feb 3, 2011 3:29 AM

Comments	
Generally my clients already know of my scope	Jan 28, 2011 4:07 AM
Have not recieved my stamp - does not one come with all the money I ahev already spent on this?	Jan 28, 2011 4:52 AM
I take great pride in showing my desire and experience and willingness to show my responsibility for my work and the work of others under my responsibility	Jan 28, 2011 5:44 AM
I have my Licence and Scope clearly posted in my office and am working in the Public Sector as a Division Manager.	Jan 28, 2011 4:04 PM
Just got my license so I cannot really comment on these items, I am not currently in a job that I require my stamp. Yet	Jan 28, 2011 4:35 PM
As I am an CSAP AP my qualifications do not need to be appended as I have passed the rigorous qualification required to be an AP and the qualifications are well known. I only work in the contaminated sites field.	Jan 28, 2011 4:50 PM
its on line so there is no need to	Jan 28, 2011 6:03 PM
I resigned from APEG years ago when it became apparent that the	Jan 28, 2011 7:01 PM
In all honesty, I do not often append the license certificate. I feel that if APEG has entrusted me by issueing the limited license, that I should be trusted to use that license properly. I have taken the law and ethics programs, and that should be sufficient to support that a limited license holder will not be responding to a proposal without being qualified in that line of work.	Jan 29, 2011 12:30 AM
	Generally my clients already know of my scope  Have not recieved my stamp - does not one come with all the money I ahev already spent on this?  I take great pride in showing my desire and experience and willingness to show my responsibility for my work and the work of others under my responsibility  I have my Licence and Scope clearly posted in my office and am working in the Public Sector as a Division Manager.  Just got my license so I cannot really comment on these items. I am not currently in a job that I require my stamp. Yet  As I am an CSAP AP my qualifications do not need to be appended as I have passed the rigorous qualification required to be an AP and the qualifications are well known. I only work in the contaminated sites field.  Its on line so there is no need to  I resigned from APEG years ago when it became apparent that the  In all honesty, I do not often append the license certificate. I feel that if APEG has entrusted me by issueing the limited license, that I should be trusted to use that license properly. I have taken the law and ethics programs, and that should be sufficient to support that a limited license holder will not be responding to a

	Comments	
10	My scope is currently under review for revision	Jan 29, 2011 1:32 AM
11	My scope is on my resume for proposal purposes, I then submit a copy if proposal is awarded	Jan 29, 2011 6:25 PM
12	My scope is restictive to the point that I cannot practise as I do In Alberta and Saskatchewan.	Jan 29, 2011 7:15 PM
13	I would have answered Regularly to both prior to taking a position with the Provincial Gov't.	Jan 31, 2011 4:34 PM
14	Currently my work is almost entirely teaching.	Jan 31, 2011 5:09 PM
15	It is used daily.	Jan 31, 2011 6:07 PM
16	I have worked in a City/Municipal environment with no requirement to seal my work.	Feb 1, 2011 6:35 PM
17	New customers/ agencies get referred to the certificate either thru APEGBC website or hard copy. Certificate will be posted on our new website. Not often is the certificate attached to specific work. Eng.L stamp is quite clear on professional status and limitations referall	Feb 3, 2011 3:29 AM

Comments (ontional)	
I think the designation confuses many people in APEGBC as well as outside of the organization.	Jan 28, 2011 4:07 AM
If the scope of wording is specialized to software engineering, what I applied for, then it will be worthwhile. If not, I have wasted my money.	Jan 28, 2011 4:52 AM
BC Authorities tend to seek a higher level of authority, ie a P.Geo or a P.Eng as being "more" qualified, as the Authority does not then have to make a decision on competency.	Jan 28, 2011 5:44 AM
Have never had a problem with recognition.	Jan 28, 2011 4:03 PM
I believe in regard to my peers that it is experience, knowledge and job performance that matter not so much whether I hold a P. Eng. or an L. Eng.	Jan 28, 2011 4:04 PM
I think the scope limitations can sometimes appear daunting to peers. As well, the interpretation of the scope can sometimes be difficult.	Jan 28, 2011 4:46 PM
I believe there is a need to educate Approving Authorities throughout BC about the existence and roles of limited licenses. To date, the BC Building Code still defines Professional Engineer as the only engineering licensed professional.	Jan 28, 2011 5:04 PM
The problem usually exists with recognition from P.Eng's	Jan 28, 2011 5:22 PM
Not considered a "member" of APEGBC.	Jan 28, 2011 6:54 PM
Almost all of my peers accept me due to my experience	Jan 28, 2011 9:30 PM
The limited license program really makes me feel like a second class citizen that can't be trusted. I don't know if my case was unique or not, but I hold a M.Sc. in hydrogeology and as my B.Sc. was in a different discipline, I did not have some basic courses that were required. APEG was requesting that I take introductory level courses in numerous courses that made no sense to take. In addition, I was to take an introductory level course in technical writing. APEG took no notice of the fact that I had 16 years of experience and was a senior hydrogeologist and Associate with a highly reputable company and would not reduce any of the	Jan 29, 2011 12:30 AN
	the organization.  If the scope of wording is specialized to software engineering, what I applied for, then it will be worthwhile. If not, I have wasted my money.  BC Authorities tend to seek a higher level of authority, ie a P.Geo or a P.Eng as being "more" qualified, as the Authority does not then have to make a decision on competency.  Have never had a problem with recognition.  I believe in regard to my peers that it is experience, knowledge and job performance that matter not so much whether I hold a P. Eng. or an L. Eng.  I think the scope limitations can sometimes appear daunting to peers. As well, the interpretation of the scope can sometimes be difficult.  I believe there is a need to educate Approving Authorities throughout BC about the existence and roles of limited licenses. To date, the BC Building Code still defines Professional Engineer as the only engineering licensed professional.  The problem usually exists with recognition from P.Eng's  Not considered a "member" of APEGBC.  Almost all of my peers accept me due to my experience  The limited license program really makes me feel like a second class citizen that can't be trusted. I don't know if my case was unique or not, but I hold a M.Sc. in hydrogeology and as my B.Sc. was in a different discipline, I did not have some basic courses that were required. APEG was requesting that I take introductory level courses in numerous courses that made no sense to take. In addition, I was to take an introductory level course in technical writing. APEG took no notice of the fact that I had 16 years of experience and was a senior hydrogeologist and

### 7. Do you feel that you receive appropriate recognition as an APEGBC

#### Comments (optional)

12 Please don't get me wrong, I am grateful for being given the right to practice as a Feb 3, 2011 3:29 AM professional, these are simply my observations.

I feel that traditional-thinking long-established members have less respect for non-university graduate professionals simply because of the long standing institution of the Professional Engineer. I believe this thinking is reflected in the fact that even thought the bylaws and codes mandate a specific performance and limitations on practice thru self-evaluation, the limited licencee is required to broadcast his limitations and mark his second class standing as a professional in terms of the association. The stamp wording 'refer to limitations' clearly shows this IMO

Surprisingly, Licensees don't even qualify for the 'ring ceremony' even though they live by the same calling.

#### 8. Have you encountered, within the last 2 years, a refusal on the part of an

	Comments	
1	My licence with respect to QP under the MSR was not considered adequate when it came to effluent discharge design. My licence was questioned with respect to Average vs Maximum	Jan 28, 2011 5:44 AM
2	The authority is the Institute of Transportation Engineers with headquarters in the US that have not recognized the Limited Licence designation. Could be they don't have this designation in the US so don't have ability to accomodate on membership info.	Jan 28, 2011 4:04 PM
3	Have not used yet.	Jan 28, 2011 4:35 PM
4	Not on a specific project; however, during a general discussion with an approving officer I learned that most approving authorities follow the "Licenced Professional" definition outlined in the either the BC Building Code or the Community Charter, and neither include Limited Licencees.	Jan 28, 2011 5:04 PM
5	not an outright refusal just offered excuses to deflect from the issue	Jan 28, 2011 6:03 PM
6	West Vancouver chief building officer 'We don't allow limited licence to do this work'  Work involved was an above gound gasoline/diesel tank and piping design.	Jan 28, 2011 9:30 PM
7	Authority refused to accept work of less complexity as it was not specified in the Licence.	Feb 1, 2011 3:53 PM
8	My current role and responsibility do not require submission to AHJ. I am working in the provincial government as a mechanical technology advisor.	Feb 3, 2011 8:18 PM

## 1. Application Process and Practice Review

	Comments	
1	My qualification process about three years	Jan 28, 2011 4:13 AM

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#### 1. Application Process and Practice Review Comments 2 I first applied for my license almost 2 years ago. I just recieved my certificate in Jan 28, 2011 5:17 AM January this year. I found communicating with APEGBC took forever. And I had to repeatedly ask what the next steps were or the status - soemtimes it took months for any response. 3 The difficulty in establishing a wording for Scope should be an itterave approach Jan 28, 2011 5:54 AM between both parties. Mandatory practice review is appropriate to ensure high standards are maintained. Payment is appropriate at a cost recovery, with options to reduce costs through other means. From the outset I recieved mixed messages re: experience versus educational 4 Jan 28, 2011 4:26 PM requirements and the job site interview cost is extremely high 5 I think the english competency should not be mandatory for Technologists who Jan 28, 2011 4:51 PM have graduated from a technical school such as BCIT. We have to take a technical communications course so I feel it was a waste of my time to do. This would be similar to what people take at UBC or SFU. Should treat the ENG L the same as the P ENG. There is no difference except one spent more time going to school while the other one spent more time on the 6 We are like 2nd class citizens within APEGBC. We pay the fees and are qualified Jan 28, 2011 4:53 PM in our field but do not have that recognized within the organization. I believe that ongoing professional development training that focuses on Jan 28, 2011 5:27 PM reinforcing ethical conduct and respecting practice limitation is more beneficial than a preset mandatory practice review. The practice review can be undertaken on random basis similar to full professional members. 8 I initiated my application in September 1995 and this evaluation is based on my Jan 28, 2011 7:01 PM recollection at that time. 9 This should also apply to EIT Jan 28, 2011 9:30 PM 10 After going through a rigorous process of getting the licence, it feels like your Jan 28, 2011 11:25 PM judgement is not trusted by APEGBC. In fact most of the L. Eng. hold responsible positions at work place and society. 11 The majority of the information that I had to submit was already on record with Jan 29, 2011 12:32 AM APEG as I had applied and been denied on my P.Geo. application, yet I still had to resubmit the majority of the info. This was unnecessary 12 Fees for initial practice review were waved due to the extraordinary circumstances Jan 29, 2011 12:42 AM of the requirement to obtain the licence. 13 It took way too long (just over 2 years) from the time I first applied to the receiving Jan 29, 2011 3:35 AM of licence and certificate 14 Once APEGBC has granted a licence, indicating the holder has met the Jan 29, 2011 6:48 PM requirements under the Act then should be treated as any other professional, 15 Although I did not find the written requirements easy to understand, the help given Jan 31, 2011 6:18 PM by APEGBC staff was excellent. Practice Reviews should be the same as other members of the Association 16 Feb 1, 2011 4:01 PM (random and not at the expense of the member) 17 I dont recall the details of the application process specifically. Feb 3, 2011 4:06 AM I have reported my experience with the practice review process instead. IMO All NEW practitioners should be treated equal. Feb 3, 2011 8:23 PM 18 Mandatory practice review process of LL and P. Eng should be similar.

2. Prog	gram Enhancements	
	Comments (Optional)	
1	Being a software engineering professional for over 20 years, I would think a bridging program should apply. Any software egnineering degree that is 20 years old would be totally obsolete in todays software engineering world - especially software:-)	Jan 28, 2011 5:17 AM
2	It is not up to APEGBC to promote the Eng.L. but rather indicate as a natural progression or alternative. It should assist Authorities in better understanding, and as a natural progression based on real life education and experiences should offer a bridging option as was available in years past.	Jan 28, 2011 5:54 AM
3	Re the 2nd item - only if the Limited Licence process is streamlined, reasonable and more affordable	Jan 28, 2011 4:26 PM
4	We pay the fees we should be able to vote.	Jan 28, 2011 4:53 PM
5	While I am certainly qualified in my field of expertise, I believe the only way to become a P.Eng. is by graduating from an accredited engineering program. A bridging program would be difficult to administer, but could be worthwhile. I would need to know more about it.	Jan 28, 2011 4:56 PM
6	Strongly agree with bridging program	Jan 28, 2011 5:26 PM
7	STRONLY AGREE with all the above.	Jan 28, 2011 5:27 PM
8	last statement is a real good idea	Jan 28, 2011 6:09 PM
9	I don't think that even a P.Eng should be able to practise in their whole field . i.e. they should only practice in their area of expertise.	Jan 28, 2011 9:30 PM
10	I strongly believe that after five years of sucessful practice as a limited licencee, full P. Eng. designation should be awarded.	Jan 28, 2011 11:25 PM
11	I am a P.Geo. The scope of my limited licence was to extend Eng.L. rights to me for a limited period of time.	Jan 29, 2011 12:42 AM
12	I dont think EngL is a stepping stone to PEng. It is a different path to allow individuals a way to gain professional status in a limited subject. P eng is broader in scope. If an EngL (or other non professional with the right background and experience) wishes to become a PEng, perhaps there should be a way to challenge the requirements, of which the fact one is a Eng L wold be a factor to consider.	Jan 29, 2011 6:48 PM
13	The idea of a bridge program is interesting and worthwhile. I think any program idea has to take into account situations similar to what I was faced with when I enrolled in the APEGBC student program over 20-years ago. I desperately wanted to become licensed, but had a young family, new mortgage and heavy workload to balance. I just couldn't manage the scale of time required to cover the course load and exams to get certified.	Feb 3, 2011 4:06 AM
	I feel that a program has to be practical and manageable within the working lives of applicants.	

# 3. Your Satisfaction with the Current or Enhanced Program

#### Comments (optional)

This is a great program and with evolving improvements a great option and strong Jan 28, 2011 5:54 AM encouragement to enable the technologist or alternative university trained individuals to seek a level of recognition for the individuals desire for responsibility.

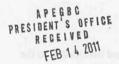
	Comments (optional)	
2	Re third item - if I were younger I would definately consider it (but now I am 50 so it is unlikely).	Jan 28, 2011 4:26 PM
3	I think if you can achieve the ENG L status that you are deemed qualified in your area of expertise. This is the same as the PENG. The only difference is that one is bound by ethics and the other is bound by the scope as defined in the license.	Jan 28, 2011 4:51 PM
4	I would certainly like to become involved as a volunteer in a bridging program, just because of the challenges involved	Jan 28, 2011 4:56 PM
5	Regardless of the items I marked "Disagree" I would still recommend the Limited Licence to a colleague.	Jan 28, 2011 5:27 PM
3	I am already a P.Geo.	Jan 31, 2011 4:34 PM
7	I currently recommend Limited Licences to colleagues regardless of question 9 and 10. They are reluctant to apply because they have heard of the long complicated process and high cost of the application.	Feb 1, 2011 4:01 PM
8	I think it is a good program. I graduated from BCIT in 1978 on the assurance from ASTTBC that one day APEGBC would have a bridge program for ASTTBC members. It was a long and anxious wait.	Feb 3, 2011 4:06 AM
	I am grateful for the opportunity to be recognized by APEGBC and to be able to practice professional engineering as permitted.	

	Response Text	
	I am pleased that I pursued the LL program and it has for the most part achieved my desired goals and objectives for obtaining this professional designation. Thank you.	Jan 28, 2011 4:56 AM
2	I strongly support the program and would be willing to assist or volunteer in any aspect which would see this improve and progress to additional opportunities	Jan 28, 2011 5:54 AM
3	A Limited Licence holder is bound by the same code of ethics as a P.Eng and is accountable to that code. (highlight #2: "undertake and accept responsibility for professional assignments only when qualified by training and experience") A Limited Licence holder can be disciplined for not adhering to the Code of Ethics. So I question why is it necessary to broadcast the scope of practice on every document. My opinion is that inasmuch as a Limited Licencee cannot practice outside of his or her limitation, neither can a P.Eng; yet a P.Eng does not require to state his or her limitation on certified documents.	Jan 28, 2011 4:18 PM
4	With the Limited Licence I have achieved my goal in regards to managing a division in the municipal public sector with associated responsibilities, however the process took 7 yrs due in part to APEG's requirements that I obtain additional education courses that were actually not attainable (UBC Master Level Eng. Courses are not available to those without an undergraduate degree). Therefore it is recommended that the APEG LL process be streamlined and reasonable	Jan 28, 2011 4:26 PM
5	It was an interesting process. I found it took a long time to complete but it is definitely worth it. Thanks.	Jan 28, 2011 4:51 PM
6	I can't emphasis enough the importance of promoting the Limited License to Approving Authorities and giving the Licensees the same membership rights as full professional members – primarily to have to rights to be involved with the association's activities and functions.	Jan 28, 2011 5:27 PM

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r. Any	y other comments on Limited Licence?			
Response Text				
7	There were signifigant professional and carear gains by obtaining my Eng.L Have recommended this path to other staff members.	Jan 28, 2011 7:01 PM		
3	I feel disheartened with the limited license process. It seemed that 16 years of experience meant nothing, and that my current role as an Associate and Senior Hydrogeologist carried little weight. The courses that I was being requested to take had little to no value to me as a hydrogeologist. In addition, the numerous statements that I had to sign stating that I would not misuse my limited license made me feel that APEG had no trust in me, regardless that I had to take the Proffesional Practice exam just like any other PEng or PGeo holder. And the fact that I need to append my license certificate to each proposal just rubs salt in the wound. Just because someone has a PEng or PGeo does not give them the right to practice outside of their discipline, yet they do not have to sign the same forms or include their license in their work. To me this is a double standard.	Jan 29, 2011 12:32 AN		
9	It is the best in my career to become an Eng. L. I encourage my colleage to apply and become an Eng. L. It brings me THE ghts and reminds me the responsibilities, also leads me to continue education for being a knowlegeable professional.	Jan 29, 2011 3:05 AM		
10	Consider changing the title to Professional Licensee (PL(eng-geo)). I think adding the term Professional would give the public, AHJ's etc the understanding that the holder is a professional, and a member of a professional engineering association	Jan 29, 2011 6:48 PM		
11	I am already a P.Geo. and was required to obtain an Eng. L. due to the requirements of Worksafe BC in relation to the approval of Forest Roads.	Jan 31, 2011 4:34 PM		
12	I found the entire application process to take a long time to complete and get approval. But after it was completed, I understood the process should not be rushed and every possible avenue should be looked at for proper qualification. This takes time and should not be rushed.	Jan 31, 2011 6:18 PM		
13	APEGBC should be contacting A.Sc.T members and inviting them to apply. This would only encourage career development and a bridging process would go a long way for the ultimate success of the program.	Feb 1, 2011 4:01 PM		
14	I don't really like the term "Limited License"	Feb 3, 2011 4:06 AM		

#### APPENDIX F - RESPONSES TO INFORMATION RELEASE







FEB 0 9 2011

Our Ref. 83217

Frank Denton, P.Eng., President, and Derek Doyle, P.Eng., MBA, Chief Executive Officer & Registrar The Association of Professional Engineers and Geoscientists of British Columbia 200 – 4010 Regent St Burnaby BC V5C 6N2

Doug Carter, C.Tech., President, and John Leech, A.Sc.T, CAE, Executive Director The Applied Science Technologists and Technicians of British Columbia 10767 – 148<sup>th</sup> St Surrey BC V3R 0S4

Dear Sirs:

I am pleased to learn of the recent announcement by the Applied Science Technologists and Technicians of British Columbia (ASTTBC) and the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC) of the formation of two joint task forces to advise the APEGBC and ASTTBC councils on matters of importance to both associations. I understand the Limited Licence Renewal Task Force and the Professional Technologists (PTech) Task Force will be reviewing issues relating to practice rights in an effort to resolve long-standing issues between the two associations and their members.

The Ministry of Science and Universities values the roles of both APEGBC and ASTTBC and as Minister responsible for both the *Engineers and Geoscientists Act* and the *Applied Science Technologists and Technicians Act*, I commend your efforts to engage in this co-operative approach to addressing the competencies of all engineering, geosciences and technology practitioners in our Province.

I look forward to hearing from your councils as to the outcomes of the Task Forces' deliberations, and trust that you will strive for a respectful and sustainable resolution as far as both associations are concerned.

... /2

Ministry of Science and Universities Office of the Minister Mailing Address: PO Box 9080 Stn Prov Govt Victoria BC V8W 9E2

Telephone: (250) 356-0179 Facsimile: (250) 952-0260 Location: Room 323, Parliament Buildings Victoria

E-mail: SU.Minister@gov.bc.ca Website: www.gov.bv.ca/su On behalf of the Province of British Columbia, I offer congratulations and best wishes to the Joint Task Force members, the two Councils and senior staff of the associations.

Sincerely,

Ida Chong, FCGA Minister

From: GREG AND JAMES BALCHIN [mailto:gjbalchin@shaw.ca]

Sent: Thursday, January 13, 2011 2:08 PM

To: Derek Doyle Subject: PTech

The development of the "PTech" designation seems to imply that there is no difference between an AScT and CTech certification. I have worked with two employers now who use the AScT designation as a requirement in there job descriptions, but they almost exclusively hire tradesmen who have "equivalent background work experience" instead. It seems that there is a grey area in the use of our designations and certifications by employers in there job descriptions. The certification process should be revised to protect us from this type of misuse. Blurring the lines between Technician and Technologist designations is placing us on the same slippery slope that APEG wishes to avoid .

#### Yours sincerely, Greg Balchin AScT

From: Colwyn Sunderland [mailto:csunderland@crd.bc.ca]

**Sent:** Thursday, January 13, 2011 9:41 AM **To:** X (ASTTBC) John Leech; Derek Doyle

Subject: PTech task force

John and Derek,

I just received today's joint information release on the Limited License and PTech task orces. I have been following the development of the PTech designation in particular with interest, and am encouraged that the two associations will be working together to develop recommendations to your respective Councils. In my experience working alongside engineers and other technologists and technicians in government, manufacturing and consulting, and in leadership of the British Columbia Water and Waste Association, I can see many ways in which a well defined and agreed scope of professional practice for technologists and technicians would add significant value for employers and the public. This can only be achieved if engineers and technologists and our respective associations can agree on reasonable boundaries, supported by legislation and clear guidelines.

Let me know if there is anything I can do to support the work of the joint task force.

Regards,

Colwyn Sunderland, AScT Local Services Engineering Coordinator Infrastructure Engineering Division Integrated Water Services Department Capital Regional District

# APPENDIX G – BRIEFING NOTE ON BRIDGING FROM ENG.L./GEO.L. TO P.ENG./P.GEO.

# BRIDGING/LADDERING FROM ENG.L. TO P.ENG. (GEO.L TO P.GEO.)

Other jurisdictions and professions who house engineers and technologists under one organization were researched (, Engineers Australia, Engineers New Zealand, Engineering Council of South Africa, AIBC, ABCFP). Only three of these have a route to qualification for candidates that can be construed as 'bridging'. All list the academic and experience/competency requirements for each grade of membership separately. It should be noted that both academic and experience/competency requirements differ for different grades of membership.

- i. The AIBC has a 'RAIC Syllabus Program' that typically takes 5 years to complete and can be followed in lieu of obtaining an accredited degree in architecture. All architects are also required to write a national examination in addition to academic and experience requirements.
- ii. The Engineering Council of South Africa has an academic bridge program for those with technology diplomas. Candidates must have 10 years professional engineering experience at the level of competence and responsibility expected of a professional engineer after graduation. Plus an appropriately structured portfolio of engineering science examinations from 3<sup>rd</sup> and 4<sup>th</sup> year modules of a four-year degree program at a faculty of engineering whose programs are accredited by ECSA.. See Appendix A at the end of this document for a description.
- iii. The Institution of Engineering and Technology UK (formerly the Institution of Electrical and Electronic Engineers) has an upgrading program from Technician to Chartered Engineer.
  <a href="http://www.theiet.org/membership/manage/transfer/index.cfm">http://www.theiet.org/membership/manage/transfer/index.cfm</a> and <a href="http://www.theiet.org/membership/types/designatory-letters/miet-q-and-e.cfm">http://www.theiet.org/membership/types/designatory-letters/miet-q-and-e.cfm</a>

#### **APEGBC Experience**

APEGBC has no formalized bridging program in place for movement to professional engineer status from Eng.L. status. .

#### Current Bridging Programs - Academic

There are two bridging programs currently in place

- Camosun College Engineering Bridge Program (full time bridge to full time engineering program)
   http://engbridge.camosun.bc.ca/
- BCIT B.Tech. in Electronics Engineering part time accepted by APEGBC as meeting academic requirements for registration through the Electrical discipline, after successful completion of a minimum of 3 Electrical confirmatory examinations from the APEGBC syllabus, or the U.S.
   Fundamental of Engineering examination. See <a href="http://www.bcit.ca/study/programs/8900btech">http://www.bcit.ca/study/programs/8900btech</a>

#### Past One-Time Bridging Model

APEGBC had a one-time bridging model for mature practitioners who had Technology Diplomas in Naval Architecture and Marine Engineering. Applicants had to prove broad-based experience in Naval Architecture or Marine Engineering in accordance with discipline-specific criteria that were based on APEGBC's Satisfactory Engineering Experience Guidelines.

Applicants also had to write and pass the equivalent of the U.S. Principles and Practice of Professional Engineering Examination in these disciplines and had to attend an oral examination in which they presented and were examined on a project design report which they had solely authored.

#### Proposed Bridging Model Alternatives

1. Academic

- Establish the standardized route to fulfilment of syllabus requirements based on a baseline of a BCIT 2- year Diploma in Technology.
- establish 2 or more routes to completion of requirements:
  - Ascertain interest levels in pursuing part-bridge programs to P.Eng. from Eng.L's and AScT's.
  - o Allow pre-application analysis of academic requirements for Eng.L's and Geo.L.'s.
  - Allow writing of APEGBC academic examinations prior to applying for PEng status for Engineering and Geoscience Licensees only.
  - Ask BCIT BEng Civil, Electrical and Mechanical B.Eng. programs to identify the additional courses they are able to offer on a part-time basis to a minimum volume of students in order to bridge between the Diploma and BEng level requirements.
  - Establish course equivalencies at BCIT for syllabus requirements in Civil, Electrical and Mechanical
  - Establish course equivalencies from Masters programs offered at BC Universities and institutions (e.g. UBC Masters in Engineering courses)

#### 2. Experience/Competency

- Use APEGBC competency-based experience assessment to evaluate experience for P.Eng. in accordance with APEGBC Competency Framework.
- Indicators are established for Civil/Municipal Infrastructure and Electrical Power and Industrial
- Based on interest levels from Eng.L., Geo.L. and AScT's develop indicators for fields orr
  practice as justified, if not already developed.

#### **APEGBC Bylaw Change**

Currently to apply for P.Eng. status, APEGBC Bylaws state that an applicant must have graduated from a four year program in engineering, applied science, geoscience technology or science.

A minor but significant change (see red text below) to APEGBC Bylaw wording is needed to allow for flexibility in academic bridging options, i.e.

#### **Registered members**

- 11 (e) Registration as a member of the association shall be granted to an applicant who has satisfied all the requirements in the Act and submitted evidence, in the approved format, satisfactory to the council, that the applicant:
  - (1) (a) has graduated:
  - (a) in applied science, engineering or geoscience from an institute of learning approved by the council in a program approved by the council; or
  - (b) with has the equivalent of:
    - (i) a university-level bachelors degree in applied science or engineering, from an institution of learning not approved by the council, or in a program not approved by the council, but has passed:
      - (A) examinations, assigned by the council from the syllabus published by the council, in the discipline of engineering of the applicant's degree, that demonstrates the applicant's knowledge is equivalent to the knowledge of those who have graduated from an institute of learning approved by the council in a program in applied science or engineering approved by the council; or
      - (B) examinations, requiring special knowledge in branches of learning specified by the council, of an association or institute approved by the council; or
    - (ii) 4 years of full-time post-secondary education in applied science, engineering, geoscience, science, or technology, and has demonstrated equivalency to graduation from an institute of learning approved by the council in a program in applied science, engineering or geoscience approved by the council, by passing the council assigned:
      - (A) examinations or coursework from the syllabus, published by the council, applicable to the discipline in which the applicant wishes to be examined, to address deficiencies in syllabus overage as determined by the council; or

(B) examinations, requiring special knowledge in branches of learning specified by the council, of an association or institute approved by the council;...

#### **Cross- References for Other Jurisdictions and Professions**

Engineering Council of South Africa <a href="http://www.ecsa.co.za/index.asp?x=procedure">http://www.ipenz.org.nz/ipenz/join/class\_guide3.cfm</a>
Engineers Australia <a href="http://www.engineersaustralia.org.au/ieaust/index.cfm?BA30FA78-9D5B-C69C-A122-73EA505152C0">http://www.engineersaustralia.org.au/ieaust/index.cfm?BA30FA78-9D5B-C69C-A122-73EA505152C0</a>

#### Appendix A – Engineering Council of South Africa Alternate Route to Registration.

Applicants whose qualifications are not recognised are considered "alternative route candidates" and are required to follow the Alternative Route as set out below.

#### Requirements

- 1. An applicant must meet the following prerequisites before ECSA will admit an applicant to this route:
  - (a) The applicant must have an engineering academic qualification at least equivalent to an accredited National Diploma.
  - (b) The applicant must have at least 10 years professional engineering experience at the level of competence and responsibility expected of a professional engineer after graduation.
- 2. Once admitted to follow the alternate route the candidate must pass an appropriately structured portfolio of engineering science examinations at any faculty of engineering whose programmes are accredited by ECSA. The portfolio must be selected from third and fourth year modules of the four-year degree programme. The subjects chosen should be related to the candidate's specific specialisation or area of practice. It may also be permissible, where appropriate, for any second year subject to be chosen to form part of this portfolio.
- 3. The total credit weighting must not be less than 40% and not more than 50% of that for the fourth year of the selected programme.
- 4. The examinations must be the regular scheduled final examinations of the University. The candidates' answers must be marked and moderated in the same way as for the rest of the class.
- 5. Course attendance is not compulsory in preparation for any examination.

#### **Process**

- 6. The procedure to be followed in processing alternate route applications for Registration as a Professional Engineer is as follows:
  - (1) A person applying for registration as a professional engineer must complete the normal application form and attach all the required documentation relevant to the specific discipline.

- (2) The administrative staff of ECSA submits the application to the relevant Professional Advisory Committee (PAC) for consideration.
- (a) If the applicant does not have an academic qualification at least equivalent to an accredited National Diploma, the application is refused.
- (b) If the minimum qualification requirement is met, the PAC further considers the application and if the applicant's work experience is considered equivalent to 10 years experience at the level of competence and responsibility expected of a professional engineer after graduation, the application proceeds to the next stage. If the work experience is not considered to be acceptable, the application is refused.
- (3) The candidate must specify the University at which he/she proposes to study, and must provide a list of the second, third and fourth year subjects available at the University concerned.
- (4) The relevant PAC assesses the applicant's academic qualification and recommends which specific subjects the candidate should complete in terms of these guidelines.
- (5) The PAC refers the list of subjects to the Qualifications and Examinations Committee (QEC), which approves or amends the proposed portfolio, and the candidate is advised accordingly.
- (6) On successful completion of the required examinations, the candidate must submit proof thereof to ECSA.
- (7) The application then proceeds to the professional review in terms of the normal procedures for professional reviews.