

APEGGA INCLUSIVITY CONSULTATION GROUP

BACKGROUND

At its September 2004 meeting, APEGGA Council created the Inclusivity Consultation Group (ICG) and authorized it to develop a program to consult with Members on the concept known as Inclusivity. The ICG subsequently engaged Ipsos Reid to develop a three-part consultation program which would focus on a White Paper to be prepared by the ICG and which outlined three options to address the Inclusivity issue, namely:

1. maintain the Status Quo
2. create a new category of Membership between the Professional Member category and the RPT category
3. modify the Board of Examiner Policies to improve admittance rates to full Professional Category of membership

The three-part consultation program developed by Ipsos Reid would be carried out in three stages, namely:

- A. conduct four focus groups to assess the clarity of the White Paper's message
- B. conduct an on-line survey that would enable all Members to respond to the concepts contained in the White Paper
- C. conduct a scientific telephone survey of 500 Members to gauge the opinions of the larger APEGGA membership

Part A of the consultation program was undertaken in May 2005, with four focus groups comprised of 10 to 12 randomly-selected Members being assembled by Ipsos Reid in Calgary, Edmonton, and Fort McMurray. At the conclusion of the four focus group sessions it was apparent that a majority of the 40 participants favoured Option 3 over either Option 2, creating a new category, or the status quo, Option 1. It was Ipsos Reid's view that although the focus group sample was small, a poll of the entire APEGGA membership would not result in a substantially different result. Specific reasons mentioned for this position were:

- Members believe that "membership" should be reserved for those whose capabilities exceed a certain "bar" of competency, as demonstrated by their education and / or experience. They are suspect of any change that can be perceived as "lowering the bar"
- Members are not convinced that extending the obligation of self-regulation to non-professionals working in the professions would result in a lower risk to the public. They are satisfied that the current model requiring non-professionals to work under the supervision of a Professional Member is providing the public with the expected level of protection

RECOMMENDATIONS

As a result of the feedback from the four focus groups, the Inclusivity Consultation Group made the following recommendations to the September 2005 Council meeting, all of which were accepted:

- do not proceed with phases two and three of the Ipsos Reid consultation process at this time
- stand down the Inclusivity Consultation Group
- create a new task force to explore other options that are being examined at the national level

- develop a terms of reference for this new task force to be presented to the December 2005 Council meeting for consideration
- flesh out the details of Option 3: i.e. re-examine Board of Examiners policies to study alternate ways of evaluating qualifications for full professional status
- communicate the outcome of the focus group discussions and the Board of Examiners policies and practices to the membership

The members of the Inclusivity Consultation Group were:

Dave Chalcraft, P.Eng./Chair

Philippe Erdmer, P.Geol.

Linda Van Gastel, P.Eng.

Carol Moen, P.Eng.

Ken Porteous, P.Eng.

Larry Staples, P.Eng.

Wim Veldman, P.Eng.

Chrys. Dmytruk, P.Eng.

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Roger Toogood, P.Eng.

Neil Windsor, P.Eng.

Philip Mulder, APR

Mark Tokarik, LLB, P.Eng.

Al Schuld, P.Eng.

Following is the text of the White Paper that was presented to the focus group participants.

**APEGGA INCLUSIVITY CONSULTATION GROUP
WHITE PAPER
FOCUS GROUPS CONSULTATION DRAFT**

MANDATE

APEGGA Council established an Inclusivity Consultation Group to undertake further dialog with Members about the concept that has been called Inclusivity. The Inclusivity Consultation Group's mandate is:

- to formulate and distribute balanced information on the issues and potential solutions to Members
- to consult with Members via e-surveys or other means that may be considered appropriate
- to consider Member feedback and prepare a white paper for consideration by Council

BACKGROUND

In 1920, the Alberta Government created an act to delegate the regulation of the practice of engineering in the Province of Alberta to the professionals themselves. This act created our Professional Association. Over the years additional categories of membership were added. Professional Geologists, and Professional Geophysicists were added in the 1960s, and Registered Professional Technologists operating within a defined scope were included in 1999, creating APEGGA, as we know it today.

As required under *The Engineering, Geology and Geophysics Professions Act (EGGP Act)*, APEGGA regulates the practices of Engineering, Geology and Geophysics. An individual who meets the qualifications established by the Board of Examiners is eligible for licensure as a Professional Engineer, Professional Geologist, Professional Geophysicist or Registered Professional Technologist. Licensure by APEGGA permits independent practice of the profession and requires practitioners to take formal and legal responsibility for the work that they do and that is done by non-professionals whom they supervise. Many others, including technologists of all kinds, are allowed to practice the professions under the supervision of an APEGGA Member, but they are not permitted to take legal responsibility for their work.

WHY CONSIDER CHANGING THE REGULATORY MODEL?

APEGGA is legally constituted through the provincial *EGGP Act*, and therefore, it must serve the needs of the public and the Alberta Government in addition to that of the membership. Over the past five years, Council has questioned whether the current practice is still the best model to achieve these goals. The subject has been studied at several annual strategy sessions and by task forces on licensure, relevancy, geosciences, and advocacy. As well, external forces such as the drive by the Alberta Society of Engineering Technologists (ASET) for a separate act providing for the regulation of technology, and the licensing of Internationally Educated Graduates have provided additional reasons for introspection, and the Government of Alberta is expecting APEGGA to provide leadership on these issues.

The Inclusivity Consultation Group has reviewed the former 2003-04 Inclusivity initiative and observe that Council's primary motivation for the initiative was the fact that there are a significant number of competent individuals practicing the professions in Alberta who are not registered as Professional Members with APEGGA. The Canadian Council of Professional Engineers (CCPE) report *From Consideration to Integration (FC2I)* estimates this number at over 15,000. While it is difficult to obtain precise numbers on the overall number, there are, for example, known to be over 250 Chartered Engineers from the United Kingdom who practice in Alberta and who are not registered with APEGGA because their qualifications do not fully meet the criteria for accreditation as Professional Members. (These individuals are legally practicing under the supervision of Professional Members as required by the *EGGP Act* and are therefore not subject to enforcement action by APEGGA.)

Council believes, however, that this situation does not provide the optimal framework for regulating the practice of the professions. The underlying principle of professional practice is that professionals can be and are entrusted to self-regulate their practice – i.e. they are wise enough and responsible enough to know the limits of their technical knowledge and will not engage in practice outside their scope of expertise. Council believes that creating a new category of membership, to include those practitioners falling between the RPT category and full Professional Member status, will enhance APEGGA's ability to regulate the practice of the professions, by extending this underlying principle to a broader spectrum of those now practicing the professions.

Council is also concerned about the fairness of the current licensure system, observing that the existing provision for practice under a limited license (RPT) is only available to technologists, while it appears that others with more advanced academic training in Engineering or Geoscience, are not able to become members of APEGGA. A related concern is that these individuals may not be able to contribute their skills and training to the maximum benefit of society under the current model.

WHAT ARE THE GUIDING PRINCIPLES?

In considering possible changes to the regulatory framework, the Inclusivity Consultation Group believes consideration of alternative models should be guided by the four following fundamental principles:

1. **Protection of the Public** – protection of the public and the public interest is paramount and should be improved by any new model of regulation
2. **Access to Skilled Professionals** – society’s access to skilled professionals must be maximized
3. **Fairness** – transparent fairness to all applicants must be carefully safeguarded and maintained
4. **Improved Credibility** – any new model should improve the image and credibility of APEGGA and its Members with the public

WHO MIGHT BENEFIT FROM AN IMPROVED REGULATORY MODEL?

Initially, Council looked at creating a new category of membership to cover three broad groups of individuals, most of whom are already practicing engineering, geology or geophysics in Alberta albeit under the supervision of a Professional Member, namely:

1. **Internationally Educated Graduates (IEGs)** – individuals who do not qualify for full Professional Member status either because of an inability to validate their academic qualifications or because their backgrounds do not match an established syllabus of courses, or who have chosen not to apply, but who have demonstrated that they are competent practitioners within their own areas of expertise
2. **Emerging and Evolving Disciplines** – individuals whose academic background is university-level engineering or geoscience which does not match an established curriculum or syllabus of courses, but whose practice is clearly engineering, geology, or geophysics
3. **Related professions** – individuals such as Professional Chemists, Physicists, Biologists, and Agrologists whose practice overlaps with traditional fields of engineering, geology or geophysics fields

Council has heard strong feedback against including the third category, that of Related Professions, and the Inclusivity Consultation Group now believes that the category of Related Professions can be appropriately regulated through collaboration with our sister-associations to which the practitioner should already belong.

The first and second groups are therefore the subjects of this further consultation.

Internationally Educated Graduates

Canada needs more engineers and geoscientists. Increasing the capacity of Canadian universities is one approach to solving the problem. Attracting trained and experienced professionals from other countries is another approach. Currently these foreign-trained professionals encounter difficulties and delays in becoming licensed to practice in Canada, as discussed in the CCPE report *Phase One – From Consideration to Integration*.

APEGGA must protect the public from the unskilled or unethical practice of engineering, geological, and geophysical practitioners. To this end, APEGGA must evaluate all applicants in an appropriate and consistent manner. For those professionals educated at universities and colleges not included in the Washington Accord, evaluation of educational qualifications can be difficult and time-consuming.

Social status and ego may be linked to professional standing. Cultural differences can make it difficult for foreign-trained professionals to work comfortably in the typical Canadian workplace, which requires language, social, business, and communication skills in addition to technical skills.

There are three categories of Internationally Educated Graduates (IEGs)

1. those who apply to APEGGA and obtain their registration
2. those who apply and fail to get registered or drop out of the process
3. those who choose not to apply for registration

In recent years, about one third of applications for professional membership in APEGGA have come from Internationally Educated Graduates (IEGs) – roughly 600 to 700 applications per year. We can expect that proportion to be maintained, or even to increase. (In Ontario, the proportion of IEG applicants is over 60 per cent.) Over a recent seven-year period, data show that 78 per cent of IEGs were deemed to be qualified (considering a combination of academic background and experience) under current rules for registration. An additional 15 per cent completed an examination assessment to satisfy conditions for registration. Therefore, roughly 40 to 50 applicants per year do not become registered as Professional Members of APEGGA.

Of much greater concern are those who apply to APEGGA and abandon the registration procedure for various reasons, and those who do not apply in the first place. This discussion is concerned with this latter population. The CCPE's FC2I report speculates that there may be as many as 15,000 foreign-trained engineering practitioners working in Alberta who are not licensed to practice. While these numbers are difficult to verify, there are many examples of IEGs working in Alberta outside the APEGGA framework. One such group is the Prairie Chapter of Chartered Engineers, which has 250 members educated in the UK and now working in Alberta who are not APEGGA Members. In most cases their academic qualifications do not match the APEGGA requirement for full Professional Member – many have a three-year degree and therefore fall between a technology diploma and a four-year Canadian degree program. These individuals, however, are generally able to obtain well-paying employment without the necessity of

formally undertaking responsibility for their work to the public, and have therefore not pursued the exam route to obtain licensure as a Professional Member.

APEGGA's mandate is to protect the public by regulating the practice of the professions. There is a concern on the part of APEGGA Council, that this mandate is not being adequately fulfilled in the case of IEGs who have not become APEGGA Members and are therefore not taking professional responsibility for their work. These non-licensed practitioners are not bound by the Code of Ethics; are not obliged to keep current with advances in technology (CPDs), nor are they required to exercise judgement to not engage in areas of practice they are not qualified for. Because they are not Members, APEGGA does not have direct regulatory authority over their practices – i.e. cannot discipline them for unskilled or unprofessional practice. In addition, there is a concern that society may not be realizing the full potential of the skills of these individuals, and that the individuals have not been fairly treated by our process.

Emerging and Evolving Disciplines

The Inclusivity Consultation Group believes that the second group, **Emerging and Evolving Disciplines**, includes individuals, who, though they do not meet an existing engineering or geoscience syllabus, have demonstrated competence through appropriate on-the-job-experience under the supervision of a Professional Member. Process Control System designers, for example, are commonly computer science graduates who design complex, high-risk control systems, the failure of which could put the public at significant risk. While they may not have the breadth of training that would be provided in a Canadian Engineering degree, they may be better trained in the intricacies of automated control systems, than the Professional Engineers who supervise them and take responsibility for their work.

The Inclusivity Consultation Group believes that Geoscientists practicing in specialized areas could also be included in the **Emerging and Evolving Disciplines** group. In Canada, geoscience programs are not accredited in any academic institution. Instead, geoscience undergraduates are simply advised of appropriate course choices in order to qualify for professional licensure upon graduation with a Bachelor of Science. The range of acceptable geoscience courses and subjects is wide. Applicants who specifically train for practice in specialized or limited areas of practice such as hydrogeology, reservoir geology, well site geology and remote sensing specialists have to meet certain minimum common knowledge requirements, but there are few restrictions on possible other subjects (courses) presented for credit. Based on many years of applications, only rare applicants would fail to qualify under the present syllabus, which introduced significant broadening of the acceptable qualifications compared to the previous syllabi. For those rare applicants who would not qualify, it is possible that a new category of membership with a restricted scope license would allow them to come under the aegis of APEGGA, allowing independent practice while being subject to APEGGA's regulatory framework.

Again, APEGGA Council is concerned that many practitioners in the Emerging and Evolving Disciplines group are currently not members of APEGGA and therefore are not subject to APEGGA's regulatory powers; and therefore that the public's interest is not

being as well safeguarded as it could be if these individuals were members, albeit in a new category of membership. Similarly, society's interests may not be best served, and the individuals may not be fairly treated by the current model.

WHAT ARE THE OPTIONS?

The Inclusivity Consultation Group has developed three options for discussion and consideration by interested Members during the consultation program, namely:

1. maintain the Status Quo
2. create a new category of APEGGA membership to include IEGs and Emerging/Evolving Disciplines
3. revise Board of Examiners policies for APEGGA qualification in order to facilitate IEGs and Emerging Discipline practitioners to become full Professional Members

Each of these options is presented for consideration and feedback below.

Option 1: Status Quo

APEGGA's method of regulating the practices of Engineering, Geology and Geophysics, as required by the *EGGP Act*, has been to license individuals, who the Board of Examiners deems to be appropriately qualified, as Professional Members of APEGGA. These Professionals are permitted to practice Engineering, Geology or Geophysics, subject to the standards of practice laid out in the Code of Ethics and the *EGGP Act*. They are required to take responsibility for their work and the work of those non-professionals whom they supervise.

Benefits

The current model has been in place for over 80 years and has served Alberta society well. There is no evidence of widespread malpractice of the professions in Alberta resulting in harm to the public.

Concerns

Alberta universities are producing only one third of the engineering graduates who annually become Professional Members of APEGGA – one third comes from other universities in Canada and one third are Internationally Educated Graduates. Many IEGs are unable to have their credentials accepted by APEGGA for licensure without writing confirmatory exams, and many of those choose not to write the exams because they are able to find good paying jobs without professional registration, and they do not have to take responsibility for their work when they practice under the supervision of an APEGGA Member.

- the Prairie Chapter of Charter Engineers in Calgary estimates that they have some 250 members who are Charter Engineers from the UK who are not registered with APEGGA and are practicing in Alberta
- the non-professionals who practice legally under supervision are not subject to APEGGA's requirements for continuing competency – i.e. keeping up-to-date with developments in the technology; or for adhering to the Code of Ethics; and APEGGA has no legal ability to apply discipline proceedings to them. APEGGA

- can only apply its regulatory powers to Members of the Association, as opposed to all the individuals who practice the professions
- this option does nothing to resolve the concerns regarding maximizing society's access to skilled professionals and fairness to individuals that were raised earlier

Option 2: Create A New Category of Membership

A new category of membership could be created that is parallel to Registered Professional Technologist. While the current concept is similar to the original Inclusivity proposal, the terms and conditions that would apply to this category have changed, and will continue to evolve as part of the consultation process.

In essence, the new category would permit unsupervised practice within a restricted scope, and would be available to individuals with Engineering or Geoscience backgrounds satisfactory to the Board of Examiners (BOE). The BOE would assess the backgrounds of individuals on a case-by-case basis, and would be free to revise requirements as the professions evolve, just as they now do for full Professional Membership. Licensure in the category would require at least as much experience as full professional licensure.

Typically, it is expected that the BOE would compare the individual's academic background to the established syllabus. If a sufficient portion of the syllabus is satisfied to enable unsupervised practice within a restricted scope, and the individual's experience confirms competence, then the BOE could decide to allow registration in the new category. The defined scope could be proposed by the candidate, but would have to be acceptable to the BOE.

This approach, which builds on the established syllabi, provides a clearly defined path to full professional membership. While not required, it would be expected that a majority of Members in this category would ultimately move to full Professional Membership.

A title for this new category has not yet been proposed, but it has been agreed that it would be substantially different from the existing Professional Engineer, Geologist and Geophysicist titles, and that it would clearly indicate the restricted practice status of the individual.

Benefits

- a mature, non-member practitioner, who voluntarily subjects him/herself to the self-regulatory framework provided by APEGGA, presents a lower risk to the public, than non-professionals who are legally practicing under the supervision of an APEGGA Professional Member. These new professionals would be subject to APEGGA's regulatory requirements including:
 - the Code of Ethics
 - continuing competency
 - discipline
 - the requirement to practice within their defined scope of practice

- Members in the new category would have a clearly defined path to Professional status, and would be encouraged to move to full Professional status in due course as they fulfilled requirements set by the BOE
- the new Members would take on legal responsibility for their work
- society would benefit from an expanded pool of professional practitioners who would be subject to APEGGA's regulations, and from being able to utilize the full potential of the new professionals' capabilities
- existing Members of APEGGA would benefit from improved credibility with the public whose interests are being better protected through expanded self-regulation by individual practitioners
- the new professionals would benefit from enlarging their career opportunities
- existing professionals would see a reduction in their personal liability with fewer supporting staff reliant on them to take responsibility for their work
- the BOE is in the best position to evaluate the credentials of applicants, and would do so for this category. This would also ensure consistency among all categories of membership

Concerns

- some Members have the perception that they would face additional competition for a limited number of jobs. These individuals are, of course, already competing for the work
- the public could be confused by the new category
- the name for a new category could too closely resemble the existing professional designations. Member input would, however, be sought in determining the name for the category
- some Members think that the case hasn't been proven that extending self-regulation to near-professionals will enhance the protection of the public
- there would be an increased workload for the BOE
- a new category of membership could be interpreted as "lowering the bar." However, the BOE would ensure that candidates were appropriately qualified without compromising standards

Option 3: Revise Board of Examiners policies for qualifications assessment

This option involves the modification of Board of Examiners' (BOE) policies and procedures for evaluation of applications for full membership. It would not require a new membership category or a defined scope of practice. BOE policy is detailed and as such no attempt is made here to outline it. The statements that follow deal only with policies that directly affect the two groups under consideration (IEGs and Emerging Disciplines).

The BOE currently uses criteria of "academics plus experience, in total" to evaluate applicants who do not have accredited degrees in Engineering, or who do not meet the required Geoscience syllabi. These cases are initially assessed examinations either to confirm academic background (confirmatory exams) or to supplement an incomplete background (course-by-course exams). Then, experience is looked at to determine (1) if, (2) how many, and (3) which exams might be waived. It is a frequent occurrence that

there is sufficient high quality experience that many/all exams are waived for this type of applicant.

Under this option, some existing BOE policies for APEGGA qualification assessments would be re-examined with the objective of promoting additional and appropriate “admission room” as described in 3.1 and 3.2 below:

3.1 Review and consider revising current BOE policies for:

- use of formulas for waiving exams based on:
 - amount of total experience
 - amount of exceptional quality experience
 - advanced degrees
- assigning confirmatory examinations
- adequate consideration for changes in educational systems since applicants’ formal education

3.2 Consider alternative paths to full APEGGA registration and adjust/expand BOE policies accordingly. Consider:

- assessing defined experience requirements instead of or in combination with examinations
 - a candidate’s academics and experience would be assessed according to current policy, then they could then be assigned “experience expectations” to be completed and verified prior to full registration
 - a candidate could be assigned "MIV" status (Member in Verification), or some other title (such as Member under Supervision) distinct from MIT (Member in Training), while attaining experience under the supervision of a full Member. The MIV would be a Member of APEGGA subject to regulation under the *EGGP Act*
- implementing a more in depth assessment process to evaluate competency in addition to or instead of exams
 - a candidate’s academics and experience would be assessed according to current policy
 - a candidate could then be assigned some examinations in combination with a more extensive experience assessment that could include portfolio submissions, interviews by Professional Members, and submission of client reports, etc.

Benefits

- does not create a new category of Professional Membership
- there is no requirement for a defined scope. All ethical practitioners are self-regulating and set their own limits
- changes to policies or their management can be made “in-house” although creating a Member in Verification (MIV) category of membership would require changes in the *EGGP Act*. A Member in Verification would be subject to APEGGA’s regulatory framework and would be required to adhere to the Code of Ethics

- the BOE is in the best position to evaluate the credentials of applicants. As such, it is clearly within its terms of reference to set the rules for registration, which is what this option does (i.e. Board decides what constitutes an “accredited degree or equivalent”)
- modifications to membership requirements or policies can be implemented relatively quickly. Potential members can become recognized more quickly than at present
- BOE maintains current flexibility in dealing with special cases (e.g. in Emerging Disciplines).

Concerns

- modified rules could be interpreted as “lowering the bar” for full Professional Membership. However, the BOE would provide a means to identify and recognize highly functional personnel without compromising standards of membership

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- the BOE would like to maintain the notion of some practice under supervision that is inherent in MIT status. Thus, in a given case, even if the BOE is comfortable waiving exams, it might be desirable to require practice under supervision for a specified period. During this time, the applicant's status would be MIV. Some potential applicants have already indicated that this would not be an acceptable designation, and want full membership by having their qualifications accepted in one step
- the development of alternative paths to registration may overly complicate BOE policy, and would certainly increase its workload significantly
- changes in policy regarding academic requirements should not unduly favour one group over another. For example, foreign graduates with technical diplomas must be considered in the same light as NAIT/SAIT graduates. When these graduates claim "foreign engineering experience," this must be examined in the context of the local (i.e. North American) definition of engineering

CONSULTATION PROCESS

APEGGA Council has authorized the Inclusivity Consultation Group to undertake a consultation program with APEGGA Members and stakeholders. To this end the Inclusivity Consultation Group has engaged the services of a national public consultation consultant, Ipsos Reid, to develop and carry out the consultation and communication program. It will consist of three components, namely:

1. focus groups conducted by Ipsos Reid
2. on-line Member survey open to all Members
3. scientific telephone survey of 500 randomly-selected Members conducted by Ipsos Reid

At the conclusion of the consultation process, APEGGA Council will be provided with a report on the findings of the Member consultation process, as input to the next stage of the decision-making process. Ultimately, **if** Council decides to proceed with creation of a new category of membership, it will require the approval of a majority of the Members of the Association in a subsequent ballot process.