

Public comment response template to Discussion Paper: Maintenance of Competence for Practising Certificates

Please send submissions by email to consult.minesafety@industry.nsw.gov.au
Submissions must be received by the due date of Monday 1 February 2016.

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Responses to discussion points

1. Is the proposed model for the MOC scheme suitable for application for practising certificate holders in NSW?

Response:

2. Are the areas of competence and their topics suitable and cover the areas adequately?

Response: Figure 2 in the discussion paper lists areas of competence for training including item 16 "Electrical Engineering". Ampcontrol submits that there should be specific competencies listed under the general heading of electrical engineering to ensure those individuals tasked with using and maintaining critical electrical systems at an operating mine have the necessary expertise. Electrical protection is a specialist area of electrical engineering. The maintenance and alteration of protection settings as the mine electrical system changes over time is critical to the safe provision of electrical power. There is anecdotal evidence that electrical protection as applied to earth fault limited networks is poorly understood across the industry. Please refer to Ampcontrol EESS presentation 2013 http://www.resourcesandenergy.nsw.gov.au/_data/assets/pdf_file/0003/492726/Tim-Wylie.pdf This presentation demonstrates a set of typical protection settings commonly found in underground coal applications that result in residual risk much higher than is reasonably practical. That is, first principle engineering calculations (rather than blindly following standards guidance and established practice) can result in lower touch potentials under fault conditions. Moreover, the examples demonstrate commonly used settings are not compliant with the latest revision of AS/NZS4871. In addition, the department has circulated a number of safety bulletins in regard to electrical protection (SB11-04, Joy safety bulletin in regard to a failed NER after an undetected DC fault, electrical shocks from properly insulated cable fed from VSDs as examples) where the required protection analysis and knowledge to maintain acceptable levels of protection goes well beyond traditional 50Hz studies, standard relays and conventional power system design 'rules of thumb'. Electrical protection as applied to surface mining networks is very different to underground mine networks, hazardous area requirements further compound electrical protection complexity and applied techniques.

3a. Are the types of formal and informal learning with their maximum claimable hours suitable?

Response: The quantisation of hours into fragments as small as two hours is potentially problematic, particularly where the industry is confronting quantifiable continuous professional development for the first time. Does a claim of one hour or two hours CPD literally make that much of a difference to one's body of knowledge? Suggest increasing total number of hours and allowing for finer quantisation.

3b. Is the percentage split between the minimum number of formal hours (66%) against a maximum of 33% for informal hours appropriate?

Response: The informal hours could be split into self-assessed, and peer reviewed, with greater recognition given to the latter. The former is where there is no independent check on what CPD has been undertaken ("I read a magazine article ..."). The latter is where the individual was engaged with peers in giving training, a technical presentation, leading group discussions, participation in standards development, and so on. These latter activities should be afforded the same weighting as the 'formal hours'.

4. Are the numbers of learning hours for each practising certificate and areas of competence appropriate to maintain competence a) per year b) over five years?

a) per year - response CPD for key positions should be of the order of 100 hours per annum minimum. These need to be shared between refreshing current knowledge, and new and emerging knowledge. Both of these areas should include technical aspects (technologies, products, systems) and 'statutory' aspects (keeping up with dynamic legislation, standards, etc).

b) over five years? - response Some of the training requirements offer no flexibility - 24 hours per annum minimum, and five year total of 120 hours are the same thing? It is typical that practitioners would have different emphases and activities year to year, and the annual minimum should accommodate this. Maybe a minimum annual requirement of 10% of five year total?

5. Are the requirements for certificate holders in the MOC scheme reasonable and practical?

Response:

6a. Are the record keeping requirements for certificate holders to satisfy in the MOC scheme reasonable and practical?

Response:

6b. Are the governance processes proposed by the department adequate to ensure compliance with the MOC scheme by practising certificate holders?

Response: Peer review should be an integral part of assessing CPD. Auditing by the department alone may not yield the gravitas of being judged by one's peers, who will bring broader perspectives, an appreciation of priorities and emphases, and a sound adjudication of what types are CPD are truly effective.