



ELECTRICAL WORKERS REGISTRATION BOARD

THIRD DISCUSSION PAPER ON PROPOSED CATEGORIES OF REGISTRATION

Issued by NJJ Sickels
Registrar
12 November 2008

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Introduction

On 23 November 2006 the Electricity Act 1992 (the Act) was amended through the Electricity Amendment Act 2006 (the Amendment Act).

The Amendment Act makes a number of changes to the electrical registration regime and the Electrical Workers Registration Board (the Board) will play a critical role in the successful implementation of the amended legislation.

The Board has been delegated the responsibility for the registration and licensing of electrical workers.

The legislation includes a number of checks and balances to ensure these responsibilities are properly discharged. For example, the Board must act in accordance with clear principles guiding registration and licensing. Other accountability mechanisms are outlined as follows:

Registration and licensing regime

The registration and licensing regime will be more flexible to allow for specialist registration categories and for competencies to be specified for the particular work authorised under each registration category.

Accountability of the Board and clarity of roles

The legislation provides greater guidance to the Board on its role and on procedures to be followed, and establishes increased accountability of the Board to the Minister.

There is also greater clarity about the respective roles of the relevant Industry Training Organisations and the Board.

Specifically, the Amendment Act requires the Board to follow guiding principles set down when determining registration and licensing matters. The Board is also required to consult with stakeholders on key matters such as registration classes, competence programmes, standards, and terms and conditions.

The Board will require the Minister's approval for notices relating to registration classes, standards, terms and conditions.

Transition Arrangements

The Amendment Act provides that existing registrations and licences are carried forward.

The Amendment Act permits the Board to start work on defining new registration categories and standards, and the terms and conditions of

registration and licensing. In doing so, the Board must consider retaining the existing worker registration classes, and it must consult with stakeholders.

Consultation

In April 2007 the Board released a discussion paper on proposed categories of registration and asked for comments. Fifty-five submissions were received.

The Board considered the submissions received and in May 2008 released a second discussion paper.

Sixty-four submissions were received on the second discussion paper prior to the submission receipt close off date and five late submissions were also received. All sixty-nine submissions have been considered by the Board.

The Board is appreciative of the time and effort put into the submissions received and, in light of those submissions, has amended the proposals contained in the second discussion paper.

The Board is now at a juncture where it wishes to progress the obtaining of the above mentioned Ministerial approval, however prior to seeking such approval the Board wishes to give all interested parties the opportunity to provide comment on the Board's amended proposals.

General comment

As stated in the second discussion paper, the Board has given consideration to the transition requirements of the Amendment Act as well as the terms and conditions for registration as such matters become integral when the question of categorisation of registration is deliberated. This paper contains amended proposed categories of registration, proposed prerequisites relating to registration and proposed transitional arrangements.

Also as stated in the second discussion paper, the Board has considered the over riding principles of training, experience, examination assessment and capstoning and is of the view that the present system for registering electricians has worked successfully. That system has electrical registration competencies incorporated into a national certification qualification framework with Board examinations used as measurement tools for specific unit standards. Alternatively, electrician registration can be achieved through "time served" training and completion of the same Board examinations as used for the above mentioned measurement tools.

While the Board acknowledges that the majority of people obtaining electrician registration do so through competency based systems the Board considers it important to retain an optional system as outlined above, as this accommodates New Zealand trained electrical workers who "fall out" of competency based systems, "informal" training, and overseas trained electrical workers.

The Board is of the view that the type of optional system presently used for the electrician category of registration should be used for all proposed registration categories.

Integrated registration categories

In view of the success of the electrician registration system which, as stated earlier in this paper, has electrical registration competencies incorporated into a national certification qualification framework with Board examinations used as measurement tools for specific unit standards, the Board considers that all other future registration categories should be part of a system where those same competencies are incorporated into all the registration categories.

Such a system would enable people to progress through the electrical registration competencies and negate the historic need to “retrain” when a person wishes to aspire to a different registration category to that for which training has already been undertaken.

Competency

The underpinning aspect of the Board amended proposals is competency.

With the exception of two proposed registration categories, which relate to the servicing of 240 volt single phase appliances and servicing work associated with plumbing and gasfitting, all proposed categories of registration have wide “limits of work” and that will enable practitioners to operate on a variety of work without the need to acquire additional registration.

It should be noted however that while the “limits of work” are wide any registered person engaging in any prescribed electrical work must be competent to do the work in question.

Servicing work

As stated earlier in this paper the Board has amended its previous proposals and those amendments fundamentally relate to the electrical servicing area.

For the purposes of the Board’s registration categories “servicing” means;

“any prescribed electrical work that involves the dismantling, repair, adjustment, reassembly and replacement of electrical fittings, other than the installation of permanently wired conductors, of works or electrical installations intended for the generation, conversion, transformation, conveyance, or control of electrical supplies.”

Proposals

In the second discussion paper the Board proposed categories of registration for electrical inspector, electrician and electrical engineer.

Following consideration of the submissions received on the second discussion paper the Board has retained the proposals for electrical inspector, electrician and electrical engineer and those proposals are reiterated as follows;

(a) Retain the category of electrical inspector registration

Reason

In the Ministry of Economic Development discussion paper titled "Proposed Electricity Safety Regulations" dated December 2007 (the Ministry's discussion paper) it is stated that higher risk electrical work should be inspected by an inspector and that such inspections require a degree of competence beyond that necessary for most electrical work. The Ministry further states that new regulations will continue with the provision that an electrical worker cannot inspect their own work.

As the Ministry is proposing regulations directly relating to electrical inspections the Board considers that the electrical inspector category of registration should be retained as such a category will ensure the above mentioned degree of competence beyond that necessary for most electrical work.

Registration requirements

The Board has considered the registration requirements for the proposed electrical inspector category of registration and is of the view that any person should be registered as an electrical inspector when that person has:

- passed the electrical inspector written examination; and
- passed the electrical inspector practical examination or assessment; and
- satisfactorily completed instruction in safe working practices, cardio-pulmonary resuscitation, basic first aid and testing as approved by the Board; and
- been registered as an electrician for not less than three years; or
- had the status of Qualified Engineer under the Electricity Act 1992 for not less than three years; or
- been registered by the Board as an electrical engineer for not less than three years.

Work limits

The Board has considered the work limits for the proposed electrical inspector category of registration and is of the view that an electrical inspector should be entitled to carry out all prescribed electrical work.

(b) Retain the category of electrician registration

Reason

The electrical work an electrician can carry out is well understood by the industry and the public. The Board therefore considers that the electrician category of registration should be retained.

Registration requirements

The Board has considered the registration requirements for the proposed electrician category of registration and is of the view that any person should be registered as an electrician when that person has:

- passed the electrician theoretical written examination; and
- passed the electrician regulatory written examination; and
- passed the electrician practical examination or three stage assessments; and
- satisfactorily completed instruction in safe working practices, cardio-pulmonary resuscitation, basic first aid and testing as approved by the Board; and
- completed an electrician competency based training programme or has obtained four years practical training/experience in the work of an electrician.

Work limits

The Board has considered the work limits for the proposed electrician category of registration and is of the view that an electrician should be entitled to carry out all prescribed electrical work with the exception of any prescribed electrical work that may be cited in the “Electricity Safety Regulations” and which is specifically required to be carried out by an electrical inspector.

(c) Introduce a category of electrical engineer registration

Reason

Persons who have the status, under the Act, of “qualified engineer” have, by virtue of their qualifications in electrical engineering, fundamentally been entitled to carry out all the work of an electrician. As the “qualified engineer” provision has not been problematic the Board is of the view that provision should be made to register people who hold the status of “qualified engineer”.

The Board is of the further view that people who hold appropriate electrical engineering qualifications but not the status of “qualified engineer” should be accommodated.

Registration requirements

The Board considered the registration requirements for the proposed category of electrical engineer registration and is of the view that any person should be registered as an electrical engineer;

- if, at the day prior to the promulgation of the “Electricity Safety Regulations”, that person was a qualified engineer under the Act and satisfactorily completed instruction in safe working practices, cardio-pulmonary resuscitation, basic first aid and testing as approved by the Board; or
- when that person has obtained a Bachelor of Engineering (Electrical) qualification; and
- has passed the electrical engineer regulatory written examination; and
- has passed the electrical engineer practical examination or three stage assessments; and
- has satisfactorily completed instruction in safe working practices, cardio-pulmonary resuscitation, basic first aid and testing as approved by the Board.

Work limits

The Board has considered the work limits for the proposed electrical engineer category of registration and is of the view that an electrical engineer should be entitled to carry out all prescribed electrical work with the exception of any prescribed electrical work that may be cited in the “Electricity Safety Regulations” and which is specifically required to be carried out by an electrical inspector.

Amended proposals

Also in the second discussion paper the Board proposed categories of registration for electrical appliance serviceperson, electrical service technician and tradesperson.

The submissions received in response to the proposals contained in the second discussion paper highlighted a number of aspects which would result in unintentional repercussions for present electrical service technician registration holders and the industry as a whole.

The Board has noted the submissions and the unintentional repercussions and proposes to introduce an electrical appliance serviceperson registration which would incorporate two limited sub-categories.

Accordingly the Board proposes the following:

(d) Introduce a category of electrical appliance serviceperson registration

Reason

The proposed electrical appliance serviceperson registration would clearly delineate installation/servicing work and further delineate 230 volt single phase appliance servicing work and servicing work associated with plumbing and gasfitting. The proposed electrical appliance serviceperson category of registration would be structured as follows:

- unlimited servicing work including the disconnection and reconnection of electrical fittings from permanent wiring for servicing purposes; and
- limited servicing work up to and including 240 volt single phase appliances supplied by a plug and flexible cord; and
- limited servicing work relating to 240 volt 16 ampere electrical fittings associated with plumbing and gasfitting.

Registration requirements

The Board has considered the registration requirements for the proposed electrical appliance serviceperson category of registration and is of the view that any person should be registered as an electrical appliance serviceperson when that person has:

- passed either the electrical appliance serviceperson or the electrical appliance serviceperson (limited) written theoretical examinations; and

- passed the electrical appliance serviceperson or the electrical appliance serviceperson (limited) practical examinations or practical assessments; and
- satisfactorily completed instruction in safe working practices, cardio-pulmonary resuscitation, basic first aid and testing as approved by the Board; and
- completed an electrical appliance serviceperson competency based training programme or has obtained eighteen months practical training/experience in the work of an electrical appliance serviceperson, or twelve months of such training/experience relating to 240 volt single phase appliances supplied by flexible cord, or twelve months of such training/experience relating to 240 volt, 16 ampere electrical equipment associated with plumbing and gasfitting.

Work limits

The Board proposes the following work limits for the proposed electrical appliance serviceperson category of registration:

unlimited	all servicing work with no voltage or current limitations including the disconnection and reconnection of electrical fittings from “fixed” wiring for servicing purposes
servicing work up to and including 240 volt single phase appliances	servicing work on 240 volt single phase appliances supplied by a plug and flexible cord
servicing work relating electrical fittings associated with plumbing and gasfitting	<p>the replacement of storage water cylinder heater elements and thermostats with elements or thermostats that have an electrical rating of not more than 240 volts and 16 amperes; and</p> <p>the disconnection from and reconnection to fixed wiring for waste disposal units, dishwashing machines, electronic water control units, water pressure devices storage water heater thermostats and storage water heater elements provided the components have an electrical rating of not more than 240 volts and 16 amperes; and</p> <p>the replacement of fittings of gas fired equipment that have an electrical rating of not more than 240 volts and 16 amperes; and the disconnection from and reconnection to fixed wiring for fittings of gas fired equipment that have an electrical rating of not more than 240 volts and 16 amperes</p>

Also in the second discussion paper, the Board proposed an electrical service technician category of registration.

The Board has noted the submissions received in response to the proposal and proposes the following:

(e) Introduce a category of electrical installer registration

Reason

The Board considers that in order to achieve outcomes which cater for a cross section of the industry and recognise specialist skills required in specific areas a new category of electrical installer should be introduced.

The Board is of the view that the proposed electrical installer category of registration should accommodate people who carry out the installation and servicing of, but not limited to;

- (i) security systems; and
- (ii) railway systems; and
- (iii) lifts/escalators; and
- (iv) heating/ventilating/air conditioning systems; and
- (v) renewable energy systems.

Registration requirements

The Board has considered the registration requirements for the proposed electrical installer category of registration and is of the view that any person should be registered as an electrical installer when that person has:

- passed the electrical installer written examination; and
- passed the electrical installer practical examination or assessment; and
- completed an electrical installer competency based training programme or obtained two years training/experience in the work of a line mechanic; and
- satisfactorily completed instruction in safe working practices, cardio-pulmonary resuscitation, basic first aid and testing as approved by the Board.

Work limits

The Board has considered the work limits for the proposed electrical installer category of registration and is of the view that any person who has either completed a competency based training programme in one of the specialist areas or obtained two years of practical training/experience in one of the specialist areas should be entitled to do all the work associated with the specialist area in which practical experience has been obtained. This includes testing and certifying specialist work and supervising trainees who are working in specialist areas.

Also in the second discussion paper the Board proposed four categories of line mechanic registration and, following consideration of submissions received, the Board is of the view that the line mechanic and cabling jointing aspects should be separated. As such the Board proposes the following:

(f) Introduce one category of line mechanic registration

Reason

As stated earlier in this paper the underpinning aspect of the Board amended proposals is competency. The proposed line mechanic category of registration has wide “limits of work” and that will enable practitioners to operate across all work on “electric lines” without the need to acquire additional registration.

Also, as stated earlier in this paper, while the “limits of work” are wide any registered person engaging in any prescribed electrical work must be competent to do the work in question.

Registration requirements

The Board has considered the registration requirements for the proposed line mechanic registration category and is of the view that any person should be registered as a line mechanic when that person has:

- passed the line mechanic written examination; and
- passed the line mechanic practical examination or assessment; and
- satisfactorily completed instruction in safe working practices, cardio-pulmonary resuscitation, basic first aid and testing as approved by the Board; and
- completed a line mechanic competency based training programme or obtained two years training/experience in the work of a line mechanic.

Work limits

The Board has considered the work limits for the proposed line mechanic category of registration and is of the view that a line mechanic should be entitled to carry out all work associated with electric lines.

(g) Introduce a cable jointer category of registration

Reason

The Board is of the view that the specialist skills required for cable jointing should be recognised through a separate registration category.

Registration requirements

The Board has considered the registration requirements for the proposed cable jointer registration category and is of the view that any person should be registered as a cable jointer when that person has:

- passed the cable jointer written examination; and
- passed the cable jointer practical examination or assessment; and
- satisfactorily completed instruction in safe working practices, cardio-pulmonary resuscitation, basic first aid and testing as approved by the Board; and
- completed a cable jointer competency based training programme or obtained two years training/experience in the work of a cable jointer.

Work limits

The Board has considered the work limits for the proposed cable jointer category of registration and is of the view that a cable jointer should be entitled to carry out all cable jointing associated with electric lines.

Other matters relating to design work

In the Ministry's discussion paper it is stated that the design of low voltage installations is proposed to be added to the prescribed electrical work requirements.

The Board's second discussion paper acknowledged the position stated by the Ministry by proposing the introduction of a category of electrical designer registration.

However the Board has subsequently received advice which states that it has

been decided not to include design in the definition of prescribed electrical work.

As electrical registration directly relates to prescribed electrical work and, on the basis of the above mentioned advice, the Board will not be proceeding with a category of electrical designer registration.

Proposed transitional registration arrangements

As stated in the introduction section of this paper the Amendment Act provides for existing registrations and licences to be carried forward.

Legislative provisions

Section 30 of the Amendment Act states:

- (1) “The Board must, as soon as practicable after the commencement of this section, consider whether it should designate, in relation to each of the following types of registration under the principal Act as in force immediately before the commencement of this section, 1 or more classes of registration under section 84 of the principal Act that, with or without modification, replace or correspond to, that type of registration:
 - (a) registered electrical service technician:
 - (b) registered electrician:
 - (c) registered line mechanic:
 - (d) registered electrical inspector.
- (2) The Board must
- (3) This section does not limit sections 84 to 90 of the principal Act.”

Present registration categories

There are at present four categories of registration and those are as follows:

- (a) electrical service technician:
- (b) electrician:
- (c) line mechanic:
- (d) electrical inspector.

The registration categories of electrical service technician, electrician and line mechanic are delineated further by the use of limitations as follows:

- (a) the registration category of electrical service technician is limited to:
 - (i) the servicing of 230 volt fittings supplied by plug and flexible cord (Level “A”); and
 - (ii) the servicing of fittings up to 460 volts and the disconnection and reconnection of those fittings from fixed wiring for servicing purposes (Level “B”); and
- (b) the registration category of electrician is limited to:
 - (i) a grouping for people (from the transitional provisions of the Act) who can not be assisted by any unregistered person while wiring installation work is carried out and who can not test or certify wiring installation work unless such work is done under the supervision of a registered electrical inspector or an electrician who is entitled to test and certify wiring installation work; and
 - (ii) domestic electronic security installations; and
- (c) the registration category of line mechanic is limited to:
 - (i) distribution; and
 - (ii) transmission; and
 - (iii) traction; and
 - (iv) cable joining.

Other authorities to carry out prescribed electrical work

In addition to the above mentioned categories of registration “qualified engineers” are authorised to carry out prescribed electrical work while tradespersons are authorised to carry out limited such work. Trainees are also authorised to assist with the carrying out of prescribed electrical work however trainees are not referenced further in this paper as it is intended to address the question of trainees in a separate paper.

Proposed transitional arrangements

The Board is of the view that registration category transitional provisions should be aligned as shown in the table on the following page.

Present category of registration or authorisation	Proposed registration categories
Electrical service technician limited to the servicing of 230 volt fittings supplied by plug and flexible cord (Level "A")	Electrical appliance serviceperson limited to servicing work up to and including 240 volt appliances supplied by a plug and flexible cord
Electrical service technician limited to the servicing of fittings up to 460 volts and the disconnection and reconnection of those fittings from fixed wiring for servicing purposes (Level "B")	Electrical appliance serviceperson
Electrical service technician unlimited	Electrical appliance serviceperson
Electrician limited from the transitional provisions of the Act	Electrician subject to any limitation determined by the Board
Electrician limited to domestic security installations	Electrical installer
Electrician	Electrician
Line mechanic limited to distribution	Line mechanic
Line mechanic limited to transmission	Line mechanic
Line mechanic limited to traction	Line mechanic
Line mechanic limited to cable joining	Cable jointer
Qualified engineer	Electrical engineer
Tradesperson	Electrical appliance serviceperson limited to servicing work relating to 240 volt 16 ampere electrical fittings associated with plumbing and gasfitting

Proposed implementation

It is planned to implement the new categories of registration after the promulgation of the "Electricity Safety Regulations".

Comments sought on this discussion paper

- 1 The Board would appreciate any comments about the implications and impact of the proposals in this paper by 27 February 2009. Comments should be sent to:

The Registrar
Electrical Workers Registration Board
P O Box 10156
WELLINGTON
Or Fax (04) 473 2395
Or by e-mail to: trish.tchernegovski@dbh.govt.nz

Please ensure that your submissions clearly identify your organisation (if any) and any other individuals or organisations represented in the submission.

The Board would prefer to receive your submission as a word document attachment to an e-mail, but fax or posted submissions are all welcome.

Also, the Board would appreciate receiving submissions in the following format:

Section No.	Issue/Proposed Change	Comment/Reason for comment
		I support/disagree with.... because....

Official Information Act 1982

- 2 Please note that any submissions received by the Board will constitute 'official information' under the Official Information Act 1982. That Act is designed to give the people of New Zealand access to information, but with exceptions to preserve the public interest and personal privacy.
- 3 The Board will prepare a summary of submissions received, together with the Board's responses. This summary is intended for circulation to parties who have made submissions.
- 4 In providing your submission, please advise the Board if you have any objections to the release of your submission, and, if you do object, the parts of your submission that you want withheld, and the grounds, under the Official Information Act, for withholding them. The Board will carefully consider your reasons when preparing and releasing any summary, and in considering any formal Official Information Act requests that might be received in the future.

Privacy Act 1993

- 5 Any personal information that you supply to the Board in the course of

making your submission will be used by the Board only in conjunction with the consideration of matters covered by this discussion paper.

- 6 Your name will be included in any summary unless you inform the Board that you do not wish your name to be included.

A handwritten signature in black ink, appearing to read "John Sickels". The signature is stylized with a large initial "J" and a long, sweeping underline.

John Sickels
Registrar