Electricity Safety (Registration & Licensing) Regulations 2010

Regulatory Impact Statement

This Regulatory Impact Statement has been prepared in accordance with the requirements of the *Subordinate Legislation Act 1994* and the *Victorian Guide to Regulation*.

February 2010

REGULATORY IMPACT STATEMENT

ELECTRICITY SAFETY (REGISTRATION & LICENSING) REGULATIONS 2010

In accordance with the *Victorian Guide to Regulation*, the Victorian Government seeks to ensure that regulations are well targeted, effective and appropriate, and that they impose the lowest possible burden on Victorian businesses and the community.

The Regulatory Impact Statement (RIS) process involves an assessment of regulatory proposals and allows members of the community to comment on proposed Regulations before they are finalised. Such public input provides valuable information and perspectives, and improves the overall quality of regulations.

This RIS has been prepared to facilitate public consultation on the proposed **Electricity Safety (Registration & Licensing) Regulations 2010**. A copy of the proposed Regulations is attached to this RIS.

Public comments and submissions are now invited on the proposed Regulations. All submissions will be treated as public documents and will be made available to other parties upon request. Written comments and submissions should be forwarded by no later than **5:00pm, 25 March, 2010** to:

Mr Anthony Bottegal
Legal Officer
Energy Safe Victoria
PO Box 262
Collins Street West
MELBOURNE VIC 8007

or email:

abottegal@esv.vic.gov.au

9 February 2010

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Mr Anthony Bottegal
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Dear Mr Bottegal

ASSESSMENT OF REGULATORY IMPACT STATEMENT

Thank you for seeking an assessment of the Regulatory Impact Statement (RIS) on the proposed *Electrical Safety (Registration and Licensing) Regulations 2010.* The Victorian Competition and Efficiency Commission (VCEC) received the final version of the above RIS and draft regulations on 4 February 2010.

The VCEC assesses the adequacy of the RIS prior to the public consultation process as required under section 11 of the *Subordinate Legislation Act 1994*.

I advise that the RIS meets the requirements of section 10(3) of the *Subordinate Legislation Act 1994*.

The VCEC's assessment is based on the adequacy of the evidence presented in the RIS and is focused on the quality of the analysis rather than the merits of the proposal itself. Feedback from affected parties during public consultation may provide further information on the nature and size of the costs and benefits. This must be taken into account when making the final decision as to whether or not to proceed with the proposal.

In the interests of transparency, most departments and agencies publish this assessment letter alongside the RIS when it is released for consultation. The VCEC recommends that you do the same.

The VCEC is building a database of Victorian Government RISs and statements of reasons for change, and will be putting your material on our website when it is released. Please inform us when you have placed this RIS on your website. Please also provide us with an electronic copy of your statement of reasons for changes to the final regulations when they are provided to the Scrutiny of Acts and Regulations Committee (refer 5.53 Subordinate Legislation Act 1994 Guidelines, 17 January 2005).

If you have any questions, please contact RegulationReview@vcec.vic.gov.au.

Yours sincerely

Sam Abusah

Assistant Director

Victorian Competition and Efficiency Commission

This Regulatory Impact Statement was prepared for Energy Safe Victoria by Regulatory Impact Solutions Pty Ltd.

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ABBREVIATIONS

'the Act' – *Electricity Safety Act 1998*

BTS – Builder's Temporary Supply

COES – Certificate of Electrical Safety

CPI – Consumer Price Index

'the Current Regulations' – those sections of the Electricity Safety (Installations) Regulations 1999 that relate to the registration and licensing of electrical contractors

EIRPC – Electrical Incident Review and Prevention Committee

ERAC – Electrical Regulatory Authorities Council

ESV – Energy Safe Victoria

ETU – Electrical Trades Union

EWR – Electrical Work Request

FTE – Full-time equivalent

IEI – Institute of Electrical Inspectors

LEI – Licensed Electrical Inspector

LEIW – Licensed Electrical Installation Worker

NCC – National Competition Council

NCP – National Competition Policy

NECA – National Electrical and Communications Association Victoria

NHMRC – National Health and Medical Research Council

NOCS – Notice of Completion System

OCEI – Office of the Chief Electrical Inspector

OCR – Optical Character Recognition

OGS – Office of Gas Safety

'the Proposed Regulations' – Electricity Safety (Registration & Licensing) Regulations 2010

PV – Present Value

REC – Registered Electrical Contractor

RIS – Regulatory Impact Statement

SECV – State Electricity Commission Victoria

SIR – Service and Installation Rules

VCEC – Victorian Competition and Efficiency Commission

WR – Australian and New Zealand Wiring Rules (AS/NZS 3000)

SUMMARY

Over the past hundred years, electricity has been crucial for improving our living standards. It powers our homes and our workplaces, and electrical products have become ubiquitous in all aspects of life.

Electricity is inherently hazardous, and its extensive use is only possible because of a multi-faceted safety approach that extends from electrical generation and transmission to electrical installations and appliances. The licensing and registration of certain classes of electricity workers, professionals and enterprises is at the centre of this multi-faceted safety approach.

The key statutory instruments for regulating the safety of electrical installation work in Victoria are the *Electricity Safety Act 1998* and the Electricity Safety (Installations) Regulations 1999. These regulations will 'sunset' (i.e., cease to have effect) on 27 April 2010, and replacement regulations need to be made. The *Subordinate Legislation Act 1994* requires that new and remade regulatory proposals that impose an 'appreciable economic or social burden on a sector of the public' must be formally assessed in a Regulatory Impact Statement (RIS). A RIS provides an evaluation framework to assess the costs and benefits of the regulatory proposal. It states the objectives of the proposal, examines the nature and extent of the problem that the proposal seeks to address, explains the effect of the proposal, and assesses the costs and benefits.

This RIS has been prepared to facilitate public consultation on the proposed **Electricity Safety (Registration & Licensing) Regulations 2010**. These proposed Regulations are being prepared by the Victorian Government and would replace those sections of the current Electricity Safety (Installations) Regulations 1999 (the 'current Regulations') that relate to the registration and licensing of electrical contractors and workers. The proposed Regulations would be made under sections 156 and 157 of the *Electricity Safety Act 1998* (the 'primary Act'). The proposed Regulations have been assessed as imposing an appreciable economic or social burden on a sector of the public (i.e., electricians).

The principal objective of the proposed Regulations is to promote public safety by minimising injury to persons and damage to property resulting from electrical accidents. A second objective is to ensure safe working practices for the electrical industry. This supports the purpose of the primary Act: to make provision for the safety of electricity supply and use and the efficiency of electrical equipment, and specifically to ensure the safety of electrical installations and electrical equipment. The proposed Regulations seek to achieve these objectives by:

- prescribing the relevant types of electrician works for which registration and licensing is required;
- providing for the registration of electrical contractors and the licensing of classes of electrical workers;
- prescribing fees, penalties and other matters authorised by the *Electricity Safety Act 1998*; and
- prescribing certain provisions of these Regulations that create infringement offences.

Regulations relating to the registration and licensing of electrical contractors and workers are currently contained in Parts 2, 3, 5 and 6 of the Electricity Safety (Installations) Regulations 1999. To improve the clarity of the registration and licensing requirements under the Act, and to simplify compliance, the proposed Regulations would see the provisions relating to registration and licensing encapsulated in a stand-alone set of regulations, titled Electricity Safety (Registration & Licensing) Regulations 2010. (The other sections of the current Regulations deal with setting appropriate safety standards for electrical installations, their testing and inspection, and duties of owners, operators and the public in relation to installations.)

In addition to these matters being established in stand-alone regulations, a number of changes to the current Regulations are proposed. The objectives of the changes are to:

- remove barriers to entry for suitably qualified electrical fitters to undertake certain types of electrical work;
- better reflect contemporary industry practice and risks;
- streamline certain licence classes; and
- recover costs in the setting of fees.

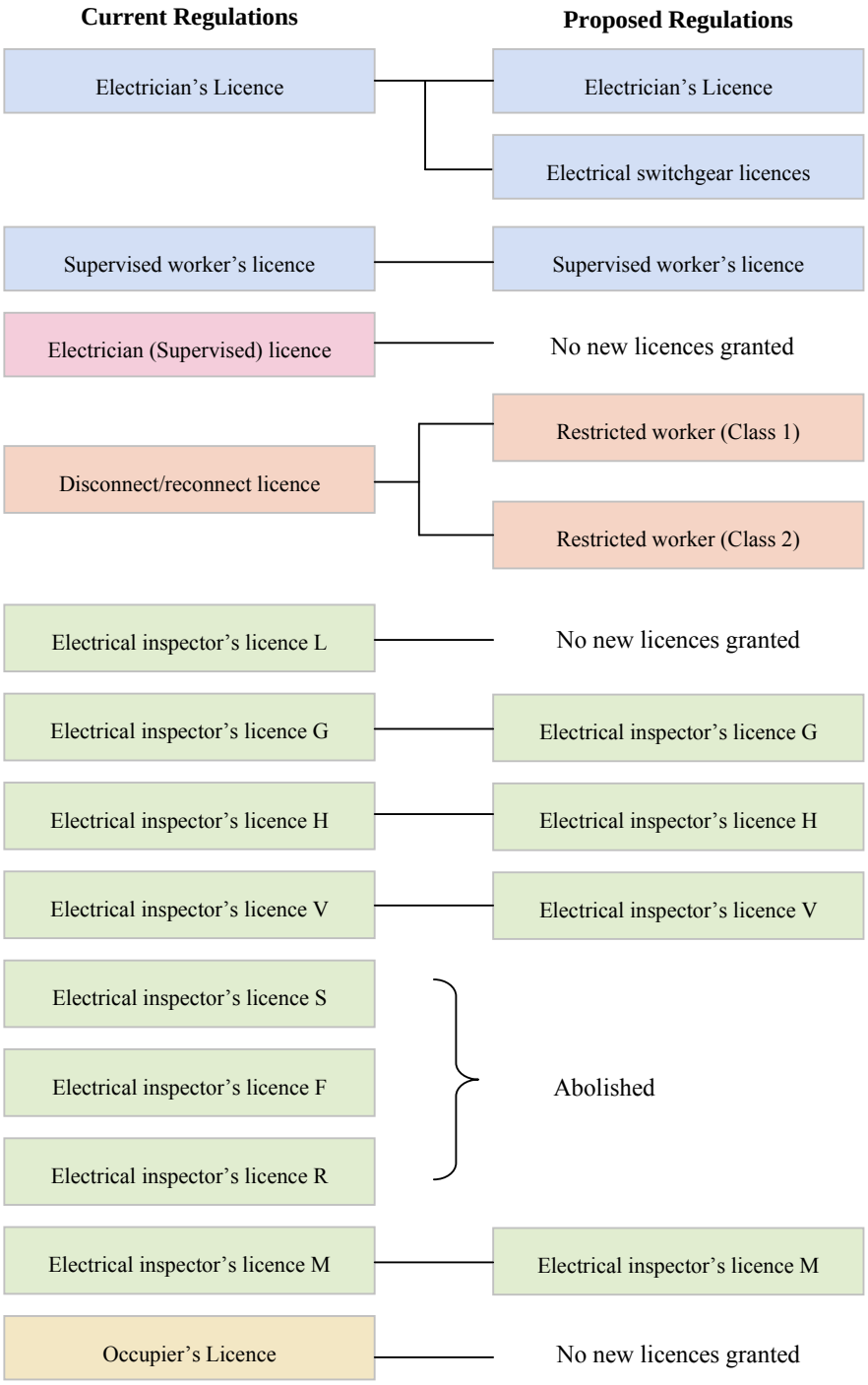
The proposed Regulations will establish a new class of licence (Electrical Switchgear Worker) that will allow a licensed person to carry out electrical switchgear fitting work, which covers the assembly, alteration, repair and maintenance of switchgear and controlgear assemblies.[1] This licence will not be required for the manufacture of switchgear and controlgear assemblies.

The existing disconnect/reconnect worker's licence would be replaced with two classes of restricted worker's licence. Class 1 would allow the licensee to conduct disconnect/reconnect work, testing and fault finding. Class 2 would allow disconnect/reconnect work and testing only.

Electrical inspector licences for categories L, S, F and R will be abolished and will be covered by the remaining categories.

[1] Switchgear and controlgear assemblies are key products in today's modern electrical systems. These assemblies house the components and devices that protect, control, distribute and manage the electrical energy for our power plants, hospitals, factories, shopping malls, buildings, etc

Current and Proposed licence types



The proposed Regulations also broaden the prescribed classes of electrical installation work to which the registration and licensing provisions apply. It will now include work on installations (operating at any voltage) in patient treatment areas of hospitals, medical and dental practices and dialyzing locations.

The financial, administrative and compliance costs imposed on the industry by the proposed Regulations are in the order of $92 million (PV) over a ten-year assessment period (the life of the proposed Regulations), or approximately $9.2 million per year. The costs imposed on the government are $2.5 million per year, which are to be recovered through proposed fees.

Therefore, the total costs of the proposed Regulations are shown below and are in the order of $118 million over a 10-year period, or approximately $12 million per annum. Averaged over the number of licensed electricians in the State, this represents just under $315 per electrician per year.

Total cost of the proposed Regulations (10-year present value)

Industry and Government Administrative Costs	**Cost ($'000s)**
Costs imposed on the industry	92,367
Government administration costs	25,302
Total	**117,669**

* Figures rounded.

The key proposed changes are summarised below (see Attachment D for a detailed comparison of the proposed Regulations to the current Regulations).

Summary of changes from the Current to the Proposed Regulations

Topic	**Details**
Expanding prescribed classes of electrical installation work, electrical contracting and electrical work	The classes of electrical installation work would be expanded to include work on installations (operating at any voltage) in patient treatment areas of hospitals, medical and dental practices and dialyzing locations. The current Regulations only cover these installations if they exceed low voltage. The change is required to capture items operating at extra low voltage in this sensitive area.
New licence class (**Electrical Switchgear Worker**)	A new class of licence for electrical switchgear workers is proposed. The licence would allow the licensed person to carry out electrical switchgear fitting work, which covers the assembly, alteration, repair and maintenance of switchgear and controlgear assemblies. A licence would not be required for the manufacture of switchgear and controlgear assemblies.

Topic	Details
Requirements for registration as a electrical contractor broadened	The requirements for registration as an electrical contractor have been broadened to allow registration in relation to electrical switchgear fitting work. Licensed electrical switchgear workers, together with licensed electricians, would be eligible to apply for registration to undertake this class of contracting or act as a technical supervisor in relation to electrical switchgear fitting work. Registration is currently on an annual basis; however, it is proposed to increase the duration of registration to 5 years. To ensure a smooth transition to the 5 year duration, in the first year REC's will be allocated a year from 1-5 to renew in and then every fifth year thereafter
Restricted electrical worker's licence (Class 1 and Class 2)	The Disconnect/reconnect worker's licence would be replaced with two classes of restricted worker's licence. • Class 1 would allow the licensee to conduct disconnect/reconnect work, testing and fault finding. • Class 2 would allow disconnect/reconnect work and testing only. The proposed changes will facilitate the implementation of the proposed national framework on Restricted Electrical Licensing, which is currently being developed by the Council of Australian Governments' Skills Recognition Taskforce.
Licence classes streamlined	Categories S, F and R electrical inspector's licenses would be abolished and would be covered by the categories G and V. The Occupier's licence and inspector's licence Category L is to be abolished for new applications.
Fees	The fees related to registration and licensing have been reviewed in accordance with the Victorian Government's Cost Recovery Guidelines. The fee levels would be re-set to recover ESV's costs. The current fee levels have not increased since 1999, and the proposed increase is generally lower than the inflation rate over that time. The proposed fees would become subject to the *Monetary Units Act 2004* and would be indexed annually by the rate determined by the Treasurer, consistent with the agreed policy on fees across government.

A proposal was also considered to increase the minimum level of public liability insurance coverage for registered electrical contractors from $5 million to $10 million. Anecdotally, it is understood that many contractors already hold insurance cover of at least $10 million. Arguments can be mounted for and against increasing the minimum insurance required by the regulations, including improved safety and reduced risks for consumers. This RIS found that there was insufficient evidence to justify the additional direct costs on business of this proposal (approximately $13 million over a 10-year period) compared to the benefits. As part of the RIS process, ESV is interested in receiving comments concerning the appropriateness

of the $5 million level of public liability insurance coverage and whether there is justification for raising the minimum level of coverage to $10 million.

The proposed Regulations also prescribe certain provisions that to be prescribed (Infringement Notice) offences under section 140A of the primary Act. This continues the arrangements already in place, but allows the revocation of the currently separate Electricity Safety (Infringements) Regulations 2000.

Under the proposed Regulations, ESV will issue a licence to an electrical switchgear worker. The worker would need to have completed four years of training as an electrical fitter, inclusive of 12 months experience in electrical fitting work, and have successfully completed a Certificate III in Switchgear and Controlgear and a Licensed Switchgear Workers Assessment conducted by ESV (or an approved examining body), or be deemed by ESV to hold equivalent qualifications, proficiency and experience in electrical switchgear fitting work.

The proposed Regulations allow ESV to issue a restricted electrical worker's licence to carry out work involving disconnection, reconnection, testing and fault finding on low voltage fixed electrical equipment or components (Class 1 includes fault finding, Class 2 will not). ESV would limit the type of electrical installation work to be performed under this licence by reference to the occupational areas specified in Schedule 2 of the proposed Regulations. The electrical installation work needs to be central to the worker's primary work function.

However, a licence may also be issued in cases where the electrical installation work is ancillary to the worker's primary work function and the worker can sufficiently demonstrate a need for the licence. In addition, the licensee would need to have the knowledge to carry out the primary work function and have completed an instruction course and a practical examination conducted by ESV (or an approved examining body) or be deemed by ESV to hold equivalent qualifications, proficiency and experience in electrical installation work.

Current regulatory fees for electrical contractors and workers have not been increased since they were introduced in 1999 due to no formal review being undertaken, and the fees being set prior to the Government's policy on fee indexation. The sunsetting of the regulations provides a timely opportunity to update the fees to ensure consistency with Government policies.

The fees associated with the regulations were reviewed in accordance with the Victorian Government's Cost Recovery Guidelines. The fee levels would be re-set from current levels to fully recover ESV's costs of administering the licensing and registrations systems. The proposed fees would become subject to the *Monetary Units Act 2004* and would be indexed annually by the rate determined by the Treasurer.

Proposed Fees in the Electricity Safety (Registration & Licensing) Regulations 2010

Description	Current fee ($)	Proposed fee ($)	% Change (nominal)	% Change (real*)
Registered electrical contractor				
Application fee for registration of electrical contractor (shown on annual basis)	240	**101****	-58%	-68
Application fee for renewal of registration of electrical contractor	170	**243**	43%	5%
Copy of the register	150	n.a.	–	–
Extract from the register	25	**32**	28%	-6%
Issue of duplicate registration card	50	**32**	-36%	-53%
Application fee for examination	180	n.a.	–	–
Licensing of electrical workers** (5 yearly fees)				
Application fee for issue of licence for a **restricted** electrical installation worker	200	**506**	153%	85%
Renewal of license for a **restricted** electrical worker	130	**243**	87%	37%
Application fee for issue of licence for an electrical installation worker	200	**324**	62%	19%
Renewal of licensed electrical worker	130	**162**	25%	-19%
Application fee for issue of licence for an electrical inspector	240	**506**	111%	54%
Application fee for renewal of licence for an electrical inspector	170	**243**	43%	5%
Issue of duplicate written licence	50	**32**	-36%	-53%
Application for examination for licensing	180	n.a.	–	–

*Percentage change (constant) –June 1999 – Index 122.3, June 2009 – Index 167.0 (CPI), increase 36.5%. Australian Bureau of Statistics, Cat, 6401.0 - Consumer Price Index, Australia, Tables 1 and 2. CPI: All Groups, Index Numbers and Percentage Changes

** The fee for a Registered Electrical Contractor is shown in annual terms. Renewal of registration will eventually occur on a 5-yearly basis, and thus will be in the order of $506.

*** Currently, licences have a duration of 5 years. This period will remain under the proposed Regulations. Therefore the fees shown above for licensing of electrical worked relate to a 5 year period.

The proposed fees are expected to generate total revenue of $30.7 million over ten years (nominal)[2], compared to an estimated $18.3 million if the current fee levels were continued. Therefore, the proposed fees will increase revenue by approximately $12 million over ten years. Given that the current fees have not been increased since 1999 there has been an

[2] In nominal or currents terms the total revenue expected over a 10-year period from the fees is $30.7 million. However, in real or discounted terms, the amount is $25.3 million which represents the cost to government for processing applications and issuing licences and permits (see government costs in the table of Total Cost of the Proposed Regulations above on page 4).

implicit under recovery costs by the fees (i.e., the current fees have not taken account of inflation over the 10 year period). The proposed fees, therefore, capture and factor-in the price increases over the last 10 years. This is because the fees have been calculated using an activity-based method based on current costs. The current costs (e.g., wages, rent, fuel) have an inflationary element embedded in them. It will also be observed that while some fees have remained broadly similar in real terms, the cost of three of the proposed fees will decline significantly, while three fees show significantly increases (in real terms). These changes arise from a detailed examination of the time, activities and resources used the process various licences and registration. That is, the proposed fees will be re-set on an 'activity cost' basis, which more accurately reflects the actual cost incurred by ESV's to provide these services.

The proposed Regulations were considered against a 'competition test' to identify restrictions on competition. It was assessed the proposed Regulations may impose minor restrictions on competition in the form of barriers to entry into various categories of electrical work. But the benefits to the community as a whole (improved quality and safety) outweigh the costs. Further, the objectives of the proposed Regulations can only be achieved by restricting competition. The minor restrictions identified relate to qualification and experience requirements for electricians. Further, it was assessed that the proposed Regulations will not lead to a material change in the administrative burden on business.

This Regulatory Impact Statement concludes:

- **the benefits to society of the proposed Regulations exceed the costs;**
- **the net benefits of the proposed Regulations are greater than those associated with the assessed alternatives;**
- **the proposed Regulations impose restrictions on competition, but the benefits of the restriction to the community as a whole outweigh the costs; and**
- **the proposed Regulations will not lead to a material change in the administrative burden on industry.**

The conclusion that the benefits of the proposed Regulations exceed the expected costs is based on a number of assumptions and estimates detailed in this RIS. As an illustration, the benefits would exceed the costs if the proposed Regulations (compared to the absence of any regulations or other action by government) prevent four deaths per year associated with electrical accidents. Given the low rate of accidental electrical fatalities achieved in Victoria over the past ten years (during the life of the current regulations) the impact of the proposed Regulations is considered reasonable, although a true counterfactual comparison is inherently difficult and therefore a precise quantification of the benefits of the proposed Regulations is difficult. Of course, in practice, the benefits of the proposed Regulations would include not only preventing accidental fatalities but also reductions in property damage and non-fatal injuries.

Public consultation

The prime objective of the RIS process is to help members of the public comment on proposed Regulations before they are finalised. Public input, which draws on practical experience, can provide valuable information and perspectives, and thus improve the overall quality of regulations. The proposed Regulations are being circulated to key stakeholders and feedback is sought. ESV welcomes and encourages feedback on the proposed Regulations.

While comments on any aspect of the proposed Regulations are welcome, stakeholders may wish to comment on:

- whether there is justification to raise the minimum level of prescribed public liability insurance from $5 million to $10 million;
- to what extent electrical contractors currently have insurance coverage of $10 million;
- the level and of the proposed fees and length of licences;
- the likely use on on-line registration;
- whether or not a less prescriptive approach has merit;
- any practical difficulties associated with the proposed Regulations; and
- any unintended consequences associated with the proposed Regulations.

In formulating the proposed Regulations stakeholders were not broadly consulted with respect to the level of fees. This RIS provides you with the opportunity to provide your comments to ESV.

All submissions will be treated as public documents and will be made available to other parties upon request.

INTRODUCTION

1.1 Regulation in Victoria: Reducing the regulatory burden

In Victoria, the *Subordinate Legislation Act 1994* requires that new or remade regulatory proposals that impose an 'appreciable economic or social burden on a sector of the public' must be formally assessed in a Regulatory Impact Statement (RIS) to ensure that the costs of the proposal are outweighed by the benefits, and that the proposal is superior to alternative approaches.

The proposed Electricity Safety (Registration & Licensing) Regulations 2010 (the proposed Regulations) have been assessed as imposing an appreciable economic burden on electricians. Accordingly, a RIS is required for the proposed Regulations. This RIS formally assesses the proposed Regulations against the requirements in the *Subordinate Legislation Act 1994* and the *Victorian Guide to Regulation incorporating: Guidelines made under the Subordinate Legislation Act 1994*.[3]

The Victorian Government's stated principles in relation to regulation are:

- reducing the regulatory burden on business and not-for-profit organisations; and
- ensuring that regulations are well targeted, effective and appropriate.

The regulatory proposals in this RIS are assessed in the context of these principles. The *Reducing the Regulatory Burden* initiative commits the Victorian Government to reducing the administrative and compliance burdens of regulation.[4] Accordingly, this RIS also uses the Victorian Standard Cost Model methodology to inform the cost-benefit analysis and to measure changes to the administrative burden.

The assessment framework of this RIS:

- examines the nature and extent of the problem to be addressed;
- outlines the objectives of the proposed Regulations;
- explains the effects of the proposed Regulations on various stakeholders; and
- assesses the costs and benefits of the proposed Regulations.

Feasible alternatives to the proposed Regulations are also considered and assessed. The RIS measures if there is any net change in the administrative burden imposed on business that arises from new elements of the regulatory proposal. It also examines potential impacts on small business and competition.

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[3] Department of Treasury and Finance, 2007, 2nd ed, *Victorian Guide to Regulation incorporating: Guidelines made under the Subordinate Legislation Act 1994 and Guidelines for the Measurement of Changes in Administrative Burden*, Melbourne.
[4] Victorian Government, 2006, *Reducing the Regulatory Burden: The Victorian Government's Plan to Reduce Red Tape*, pp. 2−3.

The proposed Regulations include fees for registration of electrical contractors and licensing of electrical workers and related matters. The Victorian Government has published *Cost Recovery Guidelines* which set out the policy principles underpinning cost-recovery arrangements in the State.[5] The Guidelines establish a whole-of-government framework for ensuring that cost-recovery arrangements are transparent, efficient, effective and consistent with legislation and policy. The assessment of fee arrangements in this RIS has been undertaken in accordance with the *Cost Recovery Guidelines*.

A primary function of the RIS process is to allow members of the public to comment on the proposed Regulations before they are finalised. Public input provides valuable information and perspectives and improves the overall quality of regulations. Accordingly, ESV, which is responsible for administering the *Electricity Safety Act 1998* and the current Regulations, is circulating the proposed Regulations to stakeholders and welcomes and encourages feedback.

[5] Department of Treasury and Finance, 2007, *Cost Recovery Guidelines: Incorporating the information formerly published in the Guidelines for Setting Fees and User-charges Imposed by Departments and Central Government Agencies*, Melbourne.

2. BACKGROUND TO ELECTRICITY SAFETY REGULATION

2.1 Electrical industry profile

Victoria's electricity industry is large and diverse. The Act and the current Regulations define the key participants in the industry in connection to electrical installations:

- electricity suppliers;
- licensed electrical installation workers;
- registered electrical contractors (REC); and
- licensed electrical inspectors (LEIs).

Table 2.1 below shows the numbers of persons registered or licensed in the categories under the Act. There are five[6] electricity suppliers and distribution businesses presently operating in Victoria. The other firms operating in the industry are predominantly small businesses (i.e., fewer than 20 employees).

Table 2.1: Number of persons registered or licensed under the Act (as at June 2009)

Category	Number
Licensed electrical installation workers	**37,526**
Registered electrical contractors	**9,506**[=]
Licensed electrical inspectors	**327***

Notes:
[=] About 50 per cent of REC are sole proprietors, 40 per cent companies and 10 per cent partnerships.
* Of these, around half are actively involved in electrical inspection work.
Source: ESV.

The Act defines 'electrical installation' as 'electrical equipment that is fixed or to be fixed in, on, under or over any land'. 'Electrical equipment' is defined as 'any appliance, wire, fitting, cable, conduit or apparatus that generates, uses, conveys or controls ... electricity'. 'Electrical installation work' encompasses installation, alteration, repair and maintenance of an electrical installation.

Under the current Regulations, a 'licensed electrician' means an electrical installation worker holding an electrician's licence under regulation 302. Under that regulation, ESV may license a person to carry out electrical installation work if it is satisfied that the person:

(i) has completed a four-year contract of training as an electrician that included at least 12 months experience in carrying out electrical installation work; and

(ii) holds a Certificate III in Electrotechnology Systems Electrician; and

[6] This figure includes Powercor's licence for the Melbourne Docklands.

(iii) has satisfactorily completed the Licensed Electrical Mechanics (LEM) Assessment conducted by a body approved by ESV;

or,

(iv) the person's standard of qualifications, proficiency and experience in electrical installation work is at least of an equivalent standard to that required under (i), (ii) and (iii).

With respect to 'registered electrical contractors' (RECs), the current Regulations provide that ESV may register or renew the registration of an applicant if it is satisfied that:

(a) the applicant is a natural person who will be responsible for the effective supervision of electrical installation work carried out on behalf of the applicant or there is a person or a sufficient number of persons nominated by the applicant to be technical supervisors who will be responsible for that supervision; and

(b) each person to be responsible for the effective supervision of electrical installation work:

(i) is a licensed electrician; and

(ii) has satisfactorily completed the Licensed Electrical Mechanics (LEM) Assessment conducted by a body approved by ESV or a substantially equivalent examination conducted by ESV or a body approved by ESV; and

(c) the applicant is a natural person who will be responsible for the business management and administration of the electrical contracting work or there is a person nominated by the applicant to be the business supervisor who will be responsible for that management and administration; and

(d) the person to be responsible for the business management and administration of the electrical contracting work has successfully completed a course of training about establishing an electrical contracting business that is approved by ESV or has passed an examination conducted by ESV or a body approved by ESV.

The current Regulations also enable ESV to licence a person to carry out electrical inspection work ('licensed electrical inspector', or LEI). For prescribed electrical installation work, the person responsible for the carrying out of the work must ensure the work is inspected by an LEI before the work is connected to the supply or before it is first used. LEIs also perform a range of other activities including:

- advising RECs;
- preliminary inspections;

- emergency investigation for ESV;
- designing electrical installations; and
- work for distribution businesses (e.g., supply investigations, voltage complaints, testing etc.).

2.2 Victoria's regulatory framework for electricity safety

2.2.1 Victorian Government policy

The Victorian Government's energy policy emphasises:

- the sustainable, secure, reliable and affordable supply of electricity and other forms of energy[7]; and
- safety in the supply and use of electricity and other forms of energy.

For each individual and for the community as a whole, energy is essential to our well-being. It powers our industries, our transport, our homes and our recreational facilities, thereby providing the basis for our economy and lifestyles. Energy for heating and cooling is essential for comfort and for public health. The sustainable, secure, reliable and affordable supply of energy is a critical policy focus for the State Government, whose high-level energy policy goals are set out in *Growing Victoria Together*, a policy framework that provides a vision for Victoria in 2010.[8]

The reliability and safety with which electricity is distributed to networks and end-users is a key focus of Victoria's energy policy.[9] In line with this focus, the Victorian Government has established a framework of economic and safety regulation to deliver Victoria's energy policy objectives.[10] Of particular relevance to the proposed Regulations, a key objective of the State's energy framework is to ensure that electricity is delivered reliably and safely. Since electricity is inherently hazardous, it must be distributed and used safely, and by people with the necessary skills. The extensive use of electricity is only possible because of a multi-faceted safety approach that extends from electrical generation and transmission to electrical installations and appliances.

2.2.2 Features of the current regulatory framework

The electrical safety regime features qualification requirements for electricity workers. The qualification requirements reflect the fact that, in electrical installation work, specialised knowledge is involved: 'the community cannot be expected to have the skill sets required to

[7] See for example *Growing Victoria Together*, a policy framework that provides a vision for Victoria in 2010; and Department of Natural Resources and Environment, 2002, 'Energy for Victoria: A Statement by the Minister for Energy and Resources'.
[8] Department of Natural Resources and Environment, 2002, Energy for Victoria: A Statement by the Minister for Energy and Resources, ISBN 1 74106 298 5, p. 5.
[9] ibid., p. 19.
[10] ibid., p. 7.

understand the technical complexities of the product and the occupational hazards which may be faced in this environment.'[11]

Because of the nature of electricity, safety regulation emerged at the very beginning of electricity's widespread use in the community. Regulations covering electrical installations and wiring have existed in Victoria since 1918. While there was significant commonality in standards across the various Australian jurisdictions, Victoria's regulations were state-specific until 1976 when the SECV adopted the Australian Standard Wiring Rules, as modified by the Wiring Regulations under s.110 of the *State Electricity Commission Act 1958*. In 1992, the regulations were revised to reflect the updated Australian Standard SEA Wiring Rules (AS3000:1991) and to establish still greater national uniformity.

Until 1998, the regulation of electrical installation safety was the responsibility of Victoria's state power company, the State Electricity Commission (SECV) and its predecessors. Privatisation of Victoria's state-owned electricity assets and the establishment of new electricity market arrangements necessitated new regulatory arrangements. The *Electricity Industry Act 1993* was the principal Act for restructuring the industry, including achieving the economic separation of electricity generation, transmission and distribution assets.

The Chief Electrical Inspector initially operated within the SECV to regulate electrical safety throughout Victoria. As part of the reforms related to electricity privatisation, the Office of the Chief Electrical Inspector (OCEI) was established as an independent regulator, firstly in accordance with the *Electricity Industry Act 1993* and then in accordance with the *Electricity Safety Act 1998*. The *Electricity Safety Act 1998* replaced parts of the *State Electricity Commission Act 1958* and two other Acts (the *Electricity Industry Act 1993* and the *Electric Light and Power Act 1958*).

The current Regulations were established in 1998 under the *Electricity Safety Act 1998* to take the place of, *inter alia*, the State Electricity Commission Wiring Regulations 1992.[12] The current Regulations differed from the previous regulations in several important ways. Together, the Act and the current Regulations assigned to RECs the responsibility for ensuring an LEI was engaged to inspect prescribed electrical installation work (hitherto, that responsibility was with the electricity supplier), and enabled the OCEI to monitor and audit the performance of electrical workers.

Following a review of Victoria's energy safety regulators, the *Energy Safe Victoria Act 2005* created ESV through a merger of the OCEI and the Office of Gas Safety (OGS). The rationale was to establish a single integrated energy regulator and therefore to streamline its work and improve efficiency, 'without compromising the high-quality safety outcomes' achieved by its predecessor organisations.[13]

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[11] Regulatory Impact Statement for the Electricity Safety (Installations)(Amendment) Regulations 2000, Office of the Chief Electrical Inspector, Victoria, August 2000.

[12] The authorising provisions for the current Regulations (and the proposed Regulations) are sections 156 and 157 of the *Electricity Safety Act 1998*. An extract of the relevant authorising provisions is at Attachment A.

[13] Second Reading Speech, Energy Safe Victoria Bill, Thursday 19 May 2005.

ESV's objectives include the following:

- ensuring the safety of electrical generation, transmission and distribution systems, electrical installations and electrical equipment; and
- controlling the safety standards of gas and electrical work.

To meet its responsibilities, ESV performs a number of functions including:

- specifying minimum safety standards associated with electrical work; and
- monitoring and enforcing compliance with the *Electricity Safety Act 1998* and the associated regulations.

The features of the regulatory framework for electrical installation safety reflect the move from a centralised system, in which the SECV was principally responsible for the safety of installation work, to a devolved model in which RECs and LEIWs are responsible for the quality of their own electrical installation work.

Under the Act, there are two categories of electrical installation work – 'prescribed' and 'non-prescribed'. Prescribed electrical installation work comprises the more complex and risky work, while the non-prescribed category represents less complex and more straightforward work. Prescribed classes of electrical inspection work are currently specified in regulation 238 of the current *Electricity Safety (Installations) Regulations 2009*.

The regulations prescribe that only licensed workers may perform electrical work comprising the installation, alteration, repair or maintenance of an electrical installation ordinarily operated at low voltage or a voltage exceeding low voltage. Any contracting or undertaking to carry out this type of electrical installation work may only be done by a registered contractor.

A person must apply for registration in writing, including details of the person, technical and business supervisors, business name, partnership or body corporate, and evidence of qualifications and insurance. The prescribed minimum insurance against civil liability for personal injury or damage to property in connection with the electrical contracting work of the registered electrical contractor is $5 million.

A person may be registered if each person responsible for supervision of electrical works is a licensed electrical installation worker, has satisfactorily completed the Licensed Electrical Mechanics (LEM) Assessment conducted by a body approved by ESV (or a substantially equivalent examination conducted by ESV or a body approved by ESV), and the person to be responsible for the business management and administration of the electrical contracting work has successfully completed a course of training about establishing an electrical contracting business that is approved by ESV (or has passed an examination conducted by ESV or a body approved by ESV). Contractors meeting equivalent requirements in other States may also be registered.

A person is able to be licensed as an electrical installation worker to carry out the electrical installation works. The person must have completed 4 years of training as an electrician, inclusive of 12 months experience in electrical installation work, and have successfully completed Certificate III in Electrotechnology Systems Electrician and Licensed Electricians

Mechanics (LEM) Assessment, or be deemed by ESV to hold equivalent qualifications, proficiency and experience.

A person may be licensed as a 'supervised worker' under the supervision of a licensed electrician to carry out the electrical installation work. The supervised worker's licence shall not exceed 3 years. The supervised worker must have either completed 4 years of training as an electrician inclusive of 12 months experience in electrical installation work or completed 4 years of training as an electrical fitter; and have met other accreditation and qualification standards, or equivalent as determined by ESV.

The regulations enable the licensing of 'disconnection/reconnection workers' limited to low voltage fixed electrical equipment in one of the following (which must be specifically identified in the licence):

- Office equipment
- Domestic equipment
- Plumbing/gas fitting equipment
- Commercial equipment
- Industrial equipment
- Refrigeration and air conditioning equipment
- Instrumentation/process control equipment
- Communication/computing equipment
- Laboratory/scientific equipment

and limited to the disconnection of that electrical equipment or a component of that electrical equipment, and the reconnection of that electrical equipment or component or the connection of other equipment or any component of equivalent power and current in the same location and without alteration to existing cables. Granting of a licence would require qualifications or training required to carry out the primary work function, a certificate relating to disconnection and reconnection accredited by the National Utilities and Electrotechnology Industry Training Board, and completion of a practical examination in safely disconnecting and reconnecting electrical equipment conducted by ESV, or if the person's standard of qualifications, proficiency and experience in the primary work function and electrical installation work is at least of an equivalent standard to that required.

The regulations also allow for licensing of 'occupiers'—a person to carry out the electrical installation work—if the person has satisfactorily completed a tertiary level course in electrical engineering that includes 80 hours of electrical installation work, and the LEM Assessment, or has equivalent qualifications, proficiency and experience.

The regulations provide for ESV to issue an electrical inspector's licence, which enables the inspector to carry out electrical inspection work. The inspector needs to demonstrate experience, competence and proficiency in the matters set out below and have completed a practical examination in electrical inspection work conducted by ESV (or approved examining body) or be deemed by ESV to hold equivalent qualifications, proficiency and

experience in electrical installation work.

Table 2.2: Classes of electrical inspection work and licence requirements

Class	Description	License requirements
L	Electrical equipment installed in installations comprising a low voltage single phase, 2 wire supply comprising consumers mains, main earthing systems, consumer terminals connection devices or those parts of main switchboards that are related to the control of installations and the protection against the spread of fire.	1. A detailed understanding of safety in electrical installations. 2. Testing methods for electrical installations. 3. The requirements of these Regulations for consumers mains, main earthing systems, main switchboards and consumer terminals connection devices.
G	Any low voltage installations other than classes H, S, F, R and M.	1. A detailed understanding of safety in electrical installations. 2. Testing methods for electrical installations. 3. The requirements of these Regulations for low voltage electrical installations.
H	Electrical equipment installed in a hazardous area described in clause 7.9.2.2 of the Australian/New Zealand Wiring Rules and electrical equipment associated with the protection of the hazardous area but not installed within the hazardous area.	1. A detailed understanding of safety in electrical installations in hazardous areas. 2. Testing methods in hazardous areas and for electrical equipment associated with the protection of hazardous areas. 3. The requirements of these Regulations for electrical installations in hazardous areas and electrical equipment associated with the protection of hazardous areas.
V	High voltage installations except high voltage electrical equipment that is— (i) associated with an electric discharge lighting system; or (ii) associated with X-ray equipment; or (iii) associated with high frequency equipment; or (iv) within self contained equipment supplied at low voltage.	1. A detailed understanding of safety in high voltage electrical installations. 2. Testing methods for high voltage installations. 3. The requirements of these Regulations for high voltage electrical installations.
S	Wiring systems, switchgear, controlgear and accessories installed to provide control and protection of standby generation or co-generation electricity supply systems.	1. A detailed understanding of safety in standby generation and co-generation electrical installations. 2. Testing methods for standby generation and co-generation installations. 3. The requirements of these Regulations for standby generation and co-generation installations.
F	Electric fences used for security purposes but not including electric fences intended primarily for the control or containment of animals.	1. A detailed understanding of safety in security fences that are electrical installations. 2. Testing methods for security fences that are electrical installations. 3. The requirements of these Regulations for security fences that are electrical installations.
R	Wiring systems, switchgear, controlgear and accessories installed to provide control and protection of stand alone power systems.	1. A detailed understanding of safety of stand alone power systems. 2. Testing methods for stand alone power systems. 3. The requirements of these Regulations for stand alone power systems.

Class	Description	License requirements
M	Fixed electrical equipment installed in body-protected or cardiac-protected electrical areas of hospitals and medical and dental practices.	1. A detailed understanding of safety in fixed electrical equipment installed in body-protected or cardiac-protected electrical areas of hospitals and medical and dental practices. 2. Testing methods for electrical installations in those areas. 3. The requirements of these Regulations for those areas.

Applications for all licenses must be in writing and demonstrate the requirements are met. Renewals are facilitated online.

The regulations also set out fees for application, examinations, and renewals. Fees are discussed in Section 7 of this RIS.

3. NATURE AND EXTENT OF THE PROBLEM TO BE ADDRESSED

3.1 Working with electricity

Electricity is inherently hazardous and its extensive use is only possible because of a multi-faceted safety approach that extends from generation and transmission to the design and operation of electrical appliances. The inherent risks associated with electrical work are managed through a variety of practices and precautions including electrical wire insulation, safety distances for aerial lines, safety depths for burying electrical cables, and the installation of safety devices.

Electricity workers have traditionally been regulated through occupational licensing because of the high level of safety risk associated with electrical work. The primary purpose of such occupational licensing is safety—that is, to ensure that those working with electricity have sufficient skills and knowledge to operate safely in respect of themselves, other workers, consumers and the public.

The safe delivery and use of electricity to the community is of paramount importance. The requirement to maximise safety outcomes encompasses the total electricity industry. To achieve this outcome requires a combination of detailed technical standards and the use of suitably qualified people to minimise community risk while maintaining safety outcomes in relation to the performance of electrical installation work. The nature of electricity demands this level of control given that the community cannot be expected to have the skill sets required to understand the technical complexities of the product and the occupational hazards which may be faced in this environment.[14]

3.2 Extent of electricity injuries

The mechanism by which electricity can cause injury varies according to the strength of the current, the method of transmission (direct or indirect), the point at which electricity enters and leaves the body, the pathway the current takes through the body as well as the physical conditions under which the event takes places.[15] Exposure to electricity can result in a range of injuries. For example, exposure to electricity can lead to injuries of the cardiovascular system (e.g. rhythm disturbances), cutaneous injuries and burns, nervous system disruption, respiratory arrest, as well as head injuries, fractures and dislocations (caused by being 'thrown' or 'knocked down' due to the severe muscle contractions induced by the current).

Australia-wide approximately 1,493 episodes in hospital occurred as a result of an electrical injury, during the two year period 2002–03 to 2003–04. This equated to a rate of 3.78 cases per 100,000 population for the period. Overall, the mean length of stay in hospitals for cases

[14] Regulatory Impact Statement for the Electricity Safety (Installations) (Amendment) Regulations 2000, Office of the Chief Electrical Inspector, Victoria, August 2000

[15] Duff K. & McCaffrey R. J., 2001, "Electrical injury and lightning injury: A review of their mechanisms and neuropsychological, psychiatric, and neurological sequelae", *Neuropsychology Review* 11 (2):101–116.

of electrical injuries was 2.94 days. In addition, there were 162 deaths occurring as a result of electrical injury over the period 2001–04.[16]

Table 3.1 shows the number of accidental electrical fatalities (excluding suicides) between 1993 and 2007-08. The table shows that the number of annual fatalities declined significantly, from 49 in each of 1993 and 1994, to 20 in 2006-07, and an unprecedented low figure of seven in 2007-08. Of the seven reported deaths in the year 2007-08, four involved electricity supply networks while three involved customers' electrical installations, appliances or equipment (see Table 3.2).[17]

Table 3.1: Number of fatal electrical accidents, Australian States and Territories, 1993 to 2008

Year	VIC	NSW	SA	WA	QLD	TAS	NT	ACT	AUST
1993	5	16	3	6	12	3	1	3	49
1994	6	23	1	4	11	1	2	1	49
1995	8	13	2	8	7	2	1	0	41
1995-96	10	13	2	6	9	4	0	0	44
1996-97	8	9	2	5	20	0	2	0	46
1997-98	4	17	2	3	11	1	0	0	38
1998-99	7	9	3	5	11	0	2	0	37
1999-00	8	11	0	6	10	0	0	0	35
2000-01	5	9	7	4	10	0	2	0	37
2001-02	1	3	2	2	3	3	1	1	16
2002-03	0	13	1	7	1	4	0	1	27
2003-04	1	10	1	3	2	0	1	0	18
2004-05	1	11	1	4	8	1	2	0	28
2005-06	6	6	0	3	3	0	3	0	21
2006-07	2	3	1	5	6	2	1	0	20
2007-08	1	0	0	1	5	0	0	0	7

Source: Electrical Regulatory Authorities Council, Australia & New Zealand, 2005–06, 2006–07 & 2007–08.

[16] Pointer, S. and Harrison, J., 2007, Electrical Injury and Death, Australian Institute of Health and Welfare, Canberra. AIHW Cat. No. INJCAT 99.

[17] Ref: ERAC 2007-08.

Table 3.2: Number of fatal electrical accidents relating to consumer installations or equipment, Australian States and Territories, 2005-06 to 2007-08

Year	VIC	NSW	SA	WA	QLD	TAS	NT	ACT	AUST
2005-06	1	2	0	0	3	0	1	0	7
2006-07	2	3	0	1	2	0	0	0	8
2007-08	0	0	0	0	3	0	0	0	3

A key milestone for ESV occurred in 2007-08, a year in which no deaths were reported in Victoria from accidents relating to consumer installations or equipment.

Victorian data for recent years can be broken down to types of injury, as shown in the table below. It shows that while fatalities associated with electrical incidents are thankfully rare, the number of incidents themselves are significant, underlining the level of risk inherent in electrical works.

Table 3.3: Electricity incidents and accidents

Description	2004/05	2005/06	2006/07	2007/08	2008/09
Fatalities	4	7	4	2	1
Serious injuries	156	67	44	68	40
Non-serious injuries	599	508	670	571	583
Significant property damage	n.a	46	49	49	80
Highly unsafe situations	n.a	30	20	31	107
Non-serious property damage	n.a	546	618	281	488
Serious electricity-related fire starts	222	199	248	56	NYA*
Non-serious electricity-related fire starts	3,229	2,345	2,596	2,791	NYA*

* Not yet available

Source: ESV Reportable incidents

Hospital admission data for Victoria was also examined. The Monash University Accident Research Centre provided data on hospital admissions from 2003 to June 2008 using the Victorian Admitted Episodes Dataset. Key points are summarised below:

Deaths

- There were 7 deaths in Victoria over the 5-year period July 2001 to June 2006 due to exposure to electric current;
- All cases were male adults aged 20-74 years, with almost three-quarters (72 per cent) of working age 20-64 years;

Hospital admissions

- There were 509 hospital admissions for injuries due to exposure to electric current in Victoria over the 5 year period, an average of 102 per year;
- Three-quarters of cases were among adults ages 20-64 years (74.9 per cent);
- Males were over-represented, accounting for 73 per cant of cases;
- The activity when injured was most frequently 'working for income' (44 per cent), followed by unpaid work (11 per cent);
- The location of injury occurrence was most frequently a private dwelling (32 per cent), followed by an industrial/construction area (13 per cent) and a trade/service area (8 per cent);
- Most cases required a stay in hospital of less than 2 days (84 per cent), with a smaller proportion requiring a stay of 2-7 days, 8-30 days (4 per cent) or greater than 30 days (4 per cent).

Emergency department presentations (non-admissions only)

- There were at least 1,881 emergency department presentations for injuries due to exposure to electric current in Victoria over the 5 year period, an average of 362 per year;
- Two-thirds were male (67 per cent);
- The activity when injured was most frequently 'working for income' (50 per cent), followed by 'leisure' (19 per cent, e.g. DIYs), and 'other work' (6 per cent).
- Electrical injuries most commonly occurred in private dwellings (33 per cent), a trade or service area (26 per cent) or an industrial or construction area (15 per cent).

3.3 Rationale for regulating electrical safety

Economic activity should be generally free from regulation unless it can be shown that it is subject to 'market failure'. In cases of market failure, markets that are left unregulated will not generate socially efficient levels of output. The socially efficient level of output is usually taken to be that which maximises the sum of the net benefits of the activity to producers and consumers. Market failure arises when the sum of these net benefits is below the maximum attainable with the existing level of resources in the economy.

A number of types of market failure can be identified in regard to the electrical market that may justify government intervention. These include information asymmetries and externalities.[18]

[18] An analogy for professional regulation reform is the reform of the legal profession. See: Shinnick, E., Bruinsma, F., Parker, C., 2003, *Aspects of regulatory reform in the legal profession: Australia, Ireland and the Netherlands*, International Journal of the Legal Profession, Vol. 10, No 3, 2003, p. 238.

Information asymmetry

The consumer of a professional or trade service needs the services of the professional or tradesman precisely because the consumer lacks the relevant specialist knowledge or expertise. Thus there is an information asymmetry between the service provider and the client. This asymmetry can have two consequences: adverse selection and agency problems.

Adverse selection affects the client's choice of provider. If clients are unable to distinguish between high-quality and low-quality providers before engaging one, the price they are willing to pay for the services will be lower than what they would be willing to pay to a high-quality provider if they could identify one. If the cost of providing the high-quality service is greater than for a low-quality provider, the price consumers will be willing to pay may be insufficient to keep high quality providers in the market. Consequently, high quality providers may exit the market, reducing the average quality of suppliers in the market.

Alternatively, if consumers are unable to transparently distinguish between high-quality providers, their choice of service provider might be constrained by a limited range of information sources such as word-of-mouth recommendations.[19] This may lead to consumers paying more for a service than they otherwise might.

Membership of an industry association or professional body is another way to inform consumers that a business has attained a certain level of competency and/or adheres to codes of practice. Such associations play an important role in the building and automotive sectors, and in real estate.

The typical solution to the problem of adverse selection has been to regulate entry to professional markets by some form of certification or licensing. Entry normally requires an educational qualification and a period of professional training. This reduces the adverse selection problem by setting and policing a minimum quality standard.

Externalities

Another justification for imposing entry requirements is that low quality electrical work can constitute a negative 'externality' by imposing costs on third parties. Externalities arise where there are missing markets for particular types of output, so those outputs are under-produced (in the case of positive externalities) or over-produced (in the case of negative externalities). In the present case, the negative externality is the adverse impact on third parties through unsafe electrical work. For example, electrical fires burning down neighbouring properties, increases in fire insurance premiums, or additional costs imposed upon the health system. In the absence of regulation, it may be difficult to ensure that a builder or an electrical contractor bears the full cost of future accidents involving future residents or users of a building.

[19] While word-of-mouth recommendations may prove a useful non-regulatory mechanism in promoting high-quality service providers, many consumers are infrequent users of electrical services, and this fact could mitigate the effectiveness of such recommendations.

Risk-based regulatory intervention[20]

A particular form of social regulation relates to requirements that seek to reduce or manage the risk of harm to health, safety or welfare of individuals or the community. Sometimes referred to as 'protective' regulation, it includes:

- measures to promote public health and safety – examples include occupational health and safety regulations, which seek to reduce the incidence of injuries and deaths in the workplace; and regulation of product and home safety (e.g., electrical safety standards), which seeks to reduce the risk of accidents causing injury;
- reducing the risk of harm to vulnerable sections of the community – examples include regulation of minimum quality standards in childcare and supported residential services, which seeks to protect children and aged care residents from poor care; and
- restrictions on the practice of certain occupations and professions – such as health services, which seek to protect consumers from risky practitioners.

Clearly, it is not possible for governments to provide a completely 'risk-free' society, or to prevent every possible event that might cause harm. While, in many cases, risk regulation will have large and important benefits, the direct and indirect costs imposed by regulatory approaches may not be as immediately obvious. Moreover, it needs to be recognised that regulation consumes scarce resources. Risk regulation that is relatively ineffective or costly will divert resources from other applications.

Risk assessment can be a particularly valuable tool to assess whether a proposal represents a high priority for government intervention to manage public risks. Risk analysis is the process of discovering what risk is associated with a particular hazard, which involves identifying hazards and the mechanisms that cause them, and estimating the probability that they will occur and their consequences.

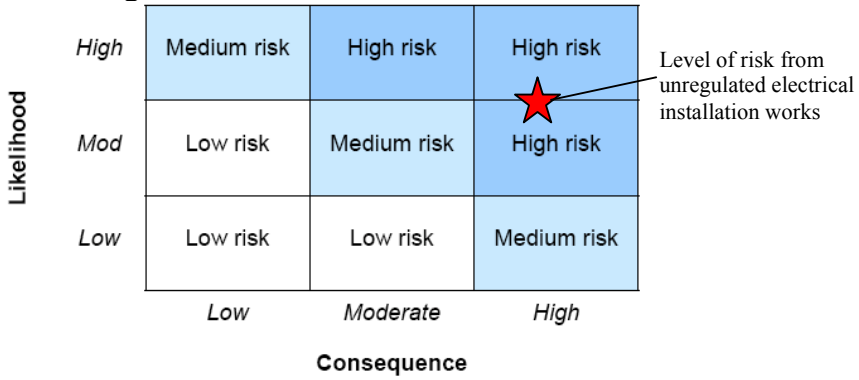
Risk analysis is a valuable tool in addressing the threshold issue of whether or not governments should intervene. It can help to determine:

- whether the risks that government intervention is intended to address are of significant magnitude compared with other risks; and
- the extent to which government intervention reduces the initial risk problem (i.e. the effectiveness of the proposed government response).

[20] Text in this section is adapted from the *Victorian Guide to Regulation* 2007, which specifically lists electrical safety standards as an example of where government regulation may be warranted.

The Victorian Guide to Regulation includes the following standard risk assessment matrix for identifying level of risk:

Figure 3.1: Risk assessment matrix



Source: *Victorian Guide to Regulation*, Figure 2.1

In terms of an ordinary person undertaking electrical installation work, the likelihood of an accident occurring is moderate to high, given that most people do not possess relevant skills to complete the work and identify risks in the work. The consequences are considered high, as nearly all electrical installation works performed unsafely have the potential to result in fatalities. Overall, in the absence of regulating the persons able to undertake electrical works, the level of risk is considered 'high risk' in the above matrix.

While government intervention cannot directly reduce the consequences associated with electrical accidents, it can effectively reduce the likelihood of accidents occurring by restricting the persons able to undertake the electrical works to those with the competency to perform the work safely.

3.4 Rationale for regulating professions

Many professions are subject to government regulation. The primary objective of regulation of the professions is to protect consumers of professional services and to protect the wider public by ensuring a minimum level of skill and competency.[21]

The regulation of professions generally exhibits the following characteristics:

- entry qualifications and registration requirements – various types of academic qualifications and experience are needed to become a professional. In some instances, even if a person has the appropriate qualifications, they must hold a licence to practice.
- business licensing – businesses must be licensed before they are able to sell their services.

[21] Deighton-Smith, R., Harris, B. and Pearson, K., 2001, *Reforming the Regulation of the Professions: Staff Discussion Paper*, National Competition Council AusInfo, Canberra, p. 3

- reservation of practice – certain areas of practice are not allowed to be performed by persons other than certified practitioners.
- reservation of title – only persons with the appropriate qualifications and/or on a register may use the professional title.
- disciplinary processes – professionals may be asked to explain their actions if their conduct is questioned, and may be disciplined or prevented from practising.[22]

In the case of regulation of Victoria's electricians, the Act and Regulations contain elements of these restrictions. For example, the current Regulations feature qualification and registration requirements, and disciplinary and enforcement arrangements associated with the conduct and professional practice of persons engaged in electrical work. The current and proposed Regulations include requirements for persons responsible for the business management and administration of the electrical contracting work.

[22] Deighton-Smith et al, op cit., pp. 5-7

4. OBJECTIVES

The purpose of the *Electricity Safety Act 1998* is "to make further provision relating to the safety of electricity supply and use and the efficiency of electrical equipment" (s. 1). The Act states that an objective of ESV is to ensure the electrical safety of electrical installations and electrical equipment (s. 6(a)).

As the identified rationale for government intervention is about minimising risks, any government response must seek to appropriately mitigate this risk (i.e., this is known as 'risk-based' regulation).

In addition, a regulatory response will ideally meet principles of 'good' regulatory design, including:

- *minimal regulation*: regulatory measures must be the minimum necessary to achieve the desired objectives, and minimise any negative impact on competition;
- *principles-based regulation*: exemptions and alternative solutions should be permissible provided these are aligned with the desired outcomes of the Act;
- *national harmonisation*: prescribed standards should reflect national, industry-wide standards; definitions and terminology in the regulations should reflect current industry practices and standards; and
- *full cost recovery*: where fees and charges are imposed, these should generally be set on a full cost recovery basis.

The principal objective to be addressed is:

- **to promote public safety by minimising injury to persons and damage to property resulting from electrical accidents.**

A secondary objective is:

- **to require safe working practices for the electrical industry.**

For given standards on the installation of electrical equipment, these two objectives require the same condition: that installation of electrical equipment be conducted in such a way that ensures those standards are met.

Current fees for electrical contractors and workers have not been increased since they were introduced in 1999 due to no formal review being undertaken, and the fees being set prior to the Government's policy on fee indexation. The sunsetting of the regulations provides a timely opportunity to update the fees to ensure consistency with Government policies.

The Act recognises that these objectives will be met by only allowing prescribed electrical works to be undertaken by persons that understand the required standards and have the technical skills to ensure the standards are met. The proposed Regulations seek to facilitate the meeting of these objectives by:

- prescribing the relevant types of electrical works;
- providing for the registration of electrical contractors responsible for those works;
- providing for the licensing of electrical workers able to undertake those works; and
- prescribing fees, penalties and other matters authorised by the *Electricity Safety Act 1998*.

5. ASSESSMENT OF NON-REGULATORY AND REGULATORY OPTIONS

5.1 Regulatory and non-regulatory options

By their nature, regulations are designed to modify behaviour in order to achieve certain results. This can impose costs known as 'compliance costs'. In simple terms, compliance costs are the costs of complying with regulations. In the context of the Victorian Standard Cost Model, these costs can be divided into 'administrative costs' and 'substantive compliance costs'.[23]

Administrative costs, often referred to as 'red tape' or administrative burden, are those costs incurred by businesses to demonstrate compliance with the regulation or to allow government to administer the regulation. Administrative costs can include costs associated with administrative requirements such as record keeping and reporting. In accordance with the requirements under *Measurement of Changes in Administrative Burden* under the *Victorian Guide to Regulation*, administrative costs in the RIS are calculated using the Victorian Standard Cost Model methodology.[24]

Substantive compliance costs are those costs that lead directly to the regulated outcomes being sought. These costs are often associated with content-specific regulation and include, for example, buying new equipment and undertaking specified training in order to meet government regulatory requirements.

The *Subordinate Legislation Act 1994* requires, *inter alia*, a RIS to assess the costs and benefits of regulatory proposals. This Act also requires that a RIS identifies practicable alternatives to the proposal and assesses their costs and benefits as compared to the proposal. The RIS is not required to identify alternatives which are not feasible or practicable.

The *Subordinate Legislation Act 1994 Guidelines* ('the Premier's Guidelines') are made under section 26 of the *Subordinate Legislation Act 1994* and provide assistance in interpreting this legislation. With respect to alternatives to the proposed Regulations, clause 2.04 of the Guidelines states that, "where the authorising Act dictates the form of subordinate legislation required, for example, where the authorising legislation provides for fees to be prescribed by statutory rule, ***there is no discretion*** to set those fees by another method" (emphasis added).[25]

5.1.1 Arrangements in other jurisdictions

Attachment J provides a table summarising the arrangements in other Australian states. All states require licensed electricians to perform electrical installation and wiring works – the scope of the work is the same, reflecting the adoption of the *Wiring Rules* Standard in all states.

[23] Department of Treasury and Finance (2007), op cit., p. F−7.
[24] Standard Cost Model Formula – Administrative Cost = (tariff x time) x (population x frequency).
[25] Subordinate Legislation Act 1994 Guidelines, Revised 2007, Section 2.04

Licensing of electrical workers is broadly similar in all states, requiring evidence of theoretical and practical competency and skills, although processes for examinations by the licensing authority differ. No state operates a negative licensing or self-regulated system, reflecting the high level of risk in electrical installation work.

There are different arrangements for the regulation of electrical contracting. Some states require contracting entities to be licensed, including requirements for demonstrating business administration skills and financial capacity. Other states do not specifically regulate contracting entities as such, but regulate the commercial activities through the electrician's licences. The current and proposed Regulations for Victoria provide for the registration of contractors.

All states participate in the mutual recognition arrangements for granting licences to persons licensed in another state.

In recent years there has been active work to develop harmonised licensing arrangements. For example, the National Uniform Electrical Licensing Advisory Council *List of Essential Performance Capability Requirements for Licensed Electricians* sets out various essential or minimum capabilities expected of a licensed Electrician in any State/Territory in Australia. The NUELAC membership covers various government and industry interests relevant to the safe and competent performance of electrical work. NUELAC therefore includes the electrical industry associations and technical/safety regulators (licensing authorities) of all Australian States/Territories. The technical courses required to be licensed as an electrician in each state are designed to meet these capability requirements.

The National Trade Licensing Reform program coordinated by the Federal Government is actively exploring opportunities to harmonise trade licensing. Through a Council of Australia Governments (COAG) process in 2006, states developed a Ministerial Direction under the *Mutual Recognition Act 1992* that specifies the equivalence of Restricted Electrical Licences (RELs) between jurisdictions. Consequently, the national Electricity Regulatory Authorities Council approached the COAG Skills Recognition Steering Committee proposing the development of a harmonised licensing framework for RELs in Australia. Regulators came to the view that the preferred approach was to harmonise RELs, and a framework was developed to achieve this harmonisation. The proposed Regulations reflect this recommendation by replacing the existing 'Disconnect/reconnect worker's licence' with Restricted Worker's Licences Class 1 and Class 2, consistent with the framework.

5.1.2 Options to be assessed

Although the regulatory options are limited, this RIS has considered a number of regulatory and non-regulatory alternatives to the proposed Regulations. The options identified in this RIS are:

- the 'base case' (i.e., that the current Regulations will sunset in 2010 and not be replaced);
- the proposed Regulations;

- self-regulation/co-regulation; and
- a negative licensing regime.

Another alternative considered but not assessed was to incorporate the proposed Regulations into the Act. This alternative would deliver similar benefits as the proposed Regulations, however the legislative vehicle is generally considered inferior to statutory rules given that minor changes to a requirement would require a legislative amendment (i.e., somewhat inflexible), is not subject to mandated ongoing review via sunsetting provisions, and is not subject to an RIS.

5.2 Methodology for assessing the options

5.2.1 Discounted Cash Flow

Every effort was made to identify and quantify the costs and benefits imposed by the proposed Regulations. As far as possible, likely costs were identified and a Present Value (PV) of the costs was calculated. A discount rate of 3.5 per cent was used over a ten-year period (i.e. the life of regulations in Victoria).[26] This allows future costs and benefits to be examined in terms of today's value of costs and benefits. The benefits specific to the proposed Regulations proved difficult to quantify in monetary terms and the assessment was made by considering the magnitude of likely benefits.

5.2.2 Multi-criteria Analysis

Multi-criteria Analysis (MCA) is presented in this RIS as an alternative assessment tool to complement the quantitative analysis. MCA represents a convenient way to assess regulatory proposals and compares a range of alternative approaches through a qualitative assessment by assigning values and weightings to the qualitative costs and benefits. A qualitative score is assigned to the impact of the proposal on a range of criteria. In this case an assigned score of one hundred (100) means that the alternative fully meets the criterion, and a score of zero means that the alternative does not meet the criterion to any extent. Further details of the MCA assessment tool are contained in Attachment I.

For the purposes of this analysis, four criteria were selected and weighted. The criteria are:

[26] Victorian Competition and Efficiency Commission 2006, *Guidance Note on Discounting*, Melbourne, p. 1

Table 5.1: Assessment criteria and weightings used for MCA

Objective/ Regulatory design principle	Criterion	Weighting
To promote public safety by minimising injury to persons and damage to property resulting from electrical accidents; and to require safe working practices for the electrical industry	The persons able to perform electrical works reduce the risks to persons and property associated with installation of electrical equipment	50%
Regulatory measures are the minimum necessary to achieve the desired objectives, and have minimum negative impact on competition	Financial, administrative and compliance costs for industry, government and consumers	15%
	Practical and low-cost implementation	15%
	Low impact on competition	10%
Exemptions and alternative solutions should be permissible provided these are aligned with the desired outcomes of the Act	Flexible approach that can facilitate alternative solutions to meet objectives	10%
	Total	***100%***

The weightings reflect the relative importance of achieving the government's objective. The primary objective is to minimise the risks of harm to persons and property associated with electrical installations. Consequently this criterion is assigned a relatively high weighting of 50 per cent.

The remaining four criteria relate to the design of the regulatory instrument to ensure that the primary objective is achieved in a cost effective manner and is efficacious in achieving the government's objective and collectively make up the remaining 50 per cent. Minimising administrative and compliance costs is a key government objective under the *Reducing the Regulatory Burden* initiative, while an option must be practical and not impose excessive implementation costs: these criteria are each assigned a weighting of 15 per cent. In addition, options should not impinge upon the efficient operation of markets or distort competition. This criterion is assigned a weighting of 10 per cent. Finally, a regulatory option should not be overly prescription or stifle innovation. This criterion is also assigned a score of 10 per cent.

5.3 The Base Case

The 'base case' describes the legislative and regulatory position that would exist in the absence of the proposed Regulations. While strictly the base case is not an alternative, it is necessary to establish this position in order to make a considered assessment of the incremental costs and benefits of the proposed Regulations.

In broad terms, the base case is represented by the level of protection afforded to consumers and the community by laws currently in place, which may cover activities dealt with by the proposed Regulations and their likely effectiveness.

Given that Victoria's electrical safety regime is established through an interaction of the

regulations and the Act, the base case is presented for the purposes of this RIS as the operation of the Act in the absence of the current Regulations and the proposed Regulations. That is, the current Regulations are allowed to lapse in 2010 with no replacement.

The practical implication of this is that there would be no prescribed classes of electrical installation work or electrical contracting that the Act requires can only be performed by licensed workers or registered contractors. Therefore, any person would be able to perform such works. While national standards for such works would exist they would not be practically enforced in the absence of a licensing system. The Act would still impose certain requirements on any person undertaking electrical installation works, such as:

> *s.43(1) A person must not install any electrical equipment which the person knows or should reasonably be expected to know is unsafe or will be unsafe if connected to an electricity supply.*

and

> *s.43(4) A person carrying out electrical installation work must ensure that—*
>
> *(a) all electrical circuits or electrical equipment handled in the course of that work are disconnected from the electricity supply; or*
>
> *(b) adequate precautions are taken to prevent electric shock or other injury in the handling of electrical circuits or electrical equipment in the course of that work.*

It is expected that in the absence of the regulations, most persons would not be able to adequately identify electrical risks or have the skills necessary to prevent shock or injury.

In terms of assessment using the MCA, under the base case each criterion is awarded a score of zero reflecting the default position (i.e., the regulatory position in the absence of the proposed Regulations). Accordingly, the base case scenario receives an overall score of zero.

5.4 The Proposed Regulations

5.4.1 Overview of the proposed regulations

The proposed Regulations seek to achieve the government's objectives of promoting public safety and minimising risk to persons and damage to property resulting from electrical accidents by:

- prescribing the types of electrical works requiring registration and licensing;
- providing for the registration of electrical contractors;
- providing for the licensing of electrical workers; and
- prescribing fees, penalties and other matters authorised by the *Electricity Safety Act 1998*.

A detailed description of the proposed Regulations is at Attachment B.

A number of changes to the current Regulations are included in the proposed Regulations. The objectives of the changes are to:

- remove barriers to entry for suitably qualified electrical fitters to undertake certain types of electrical work;
- better reflect contemporary industry practice and risks;
- recover costs in the setting of fees; and
- streamline or abolish certain licence classes.

The key changes are summarised below in Table 5.2 (see Attachment D for a detailed comparison of the proposed Regulations with the current Regulations).

Table 5.2: Summary of differences between current and proposed Regulations

Topic	Details
Expanding the prescribed classes of electrical installation work, electrical contracting and electrical work	The classes of electrical installation work would be expanded to include work on installations (operating at any voltage) in patient treatment areas of hospitals, medical and dental practices and dialyzing locations. The current Regulations only cover these installations if they exceed low voltage. The change is required to capture items operating at extra low voltage in this sensitive area.
New licence class (**Electrical Switchgear Worker**)	A new class of licence for electrical switchgear workers is proposed. The license would allow a person to carry out electrical switchgear fitting work which covers the assembly, alteration, repair and maintenance of switchgear and controlgear assemblies. A licence would not be required for the manufacture of switchgear and controlgear assemblies.
Requirements for registration as a electrical contractor broadened	The requirements for registration as an electrical contractor have been broadened to allow registration in relation to electrical switchgear fitting work. Licensed electrical switchgear workers, together with licensed electricians, would be eligible to apply for registration for this class of contracting or act as a technical supervisor in relation to electrical switchgear fitting work.

Topic	Details
Restricted electrical worker's licence (Class 1 and Class 2)	The Disconnect/reconnect worker's licence would be replaced with two classes of restricted worker's licence. • Class 1 would allow the licensee to conduct disconnect/reconnect work, testing and fault finding. • Class 2 would allow disconnect/reconnect work and testing only. The proposed changes will facilitate the implementation of the proposed national framework on Restricted Electrical Licensing, which is currently being developed by the Council of Australian Governments' Skills Recognition Taskforce.
Licence classes streamlined	Electrical inspector licence categories S, F and R would be abolished and would be covered by the G and V categories (see Table 2.2 above). The Occupier licence and inspector category L licence would continue for existing licensees but is to be abolished for new applications.

Offences may be prescribed (infringement notice) offences for the purposes of section 140A of the Act. It is proposed that prescribed offences relating to these Regulations (which will mirror the current prescribed offences) be located in the proposed Regulations, allowing for the revocation of the currently separate Electricity Safety (Infringements) Regulations 2000.

Under the proposed Regulations, ESV would issue a licence to an electrical switchgear worker to carry out electrical switchgear fitting work, which covers the assembly, alteration, repair and maintenance of switchgear and controlgear assemblies. The electrical worker would need to have completed four years of training as an electrical fitter, inclusive of 12 months experience in electrical fitting work, and have successfully completed Certificate III in Switchgear and Controlgear and Licensed Switchgear Workers Assessment conducted by ESV (or an approved examining body), or be deemed by ESV to hold equivalent qualifications, proficiency and experience in electrical switchgear fitting work.

The change to the 'disconnect/reconnect worker's licence' to become restricted worker licences classes 1 and 2 implements proposals of the COAG Skills Recognition Taskforce proposed harmonisation framework for restricted electrical licensing.

ESV would issue a restricted electrical worker's licence (Class 1) to carry out work involving disconnection, reconnection, testing and fault finding on low voltage fixed electrical equipment or components. ESV must limit the type of electrical installation work to be performed under this licence by reference to the occupational areas specified in Schedule 2. The electrical installation work needs to be central to the worker's primary work function.

However, a licence may also be issued in cases where the electrical installation work is ancillary to the worker's primary work function and the worker can sufficiently demonstrate a need for the licence. In addition, the licensee would need to have the knowledge to carry out the primary work function and have completed an instruction course and a practical examination conducted by ESV (or an approved examining body) or be deemed by ESV to hold equivalent qualifications, proficiency and experience in electrical installation work.

ESV would issue a restricted electrical worker's licence (Class 2) to carry out work involving disconnection, reconnection and testing on low voltage fixed electrical equipment or components. As is the case for Class 1, the electrical installation work would need to be central or ancillary to the worker's primary work function and the worker can sufficiently demonstrate a need for the licence. ESV must limit the type of electrical installation work to be performed under this licence by reference to the occupational areas specified in Schedule 2.. The licensee would need to have the knowledge to carry out the primary work function and have completed an instruction course and a practical examination conducted by ESV (or an approved examining body) or be deemed by ESV to hold equivalent qualifications, proficiency and experience in electrical installation work.

Prescribed public liability insurance

A change to the minimum prescribed public liability insurance from the current level of $5 million to $10 million was considered. This consideration took into account the inherently risky nature of electricity compared to professional insurance associated with other trades. Anecdotally, from discussions with insurance brokers, it is understood that many electrical contractors may already have insurance coverage of $10 million or more. It is also noted that the National Electrical and Communications Association of Australia already recommends that at least $10 million of insurance cover be taken out.

Increasing the prescribed level of insurance cover provides additional benefit to consumers by increasingly the likelihood that they will receive compensation in the event of a claimable incident; or in other words, reduce the risk that consumers will miss out on compensation due to contractor insolvency.

The cost of insurance for individual contractors is also affected by their past performance (reported incidents and claims), and therefore a higher insurance requirement should theoretically impose disproportionally higher costs on contractors with a poor performance record. At the margin, this could be expected to result in these contractors being denied insurance cover at the higher level or facing prohibitively high prices for the insurance. Overall, this would result in an increase to the average safety quality of all contractors. However, there is no reliable data to confirm this impact or its magnitude.

Against these benefits, increasing the minimum prescribed insurance has costs. Increasing the level of insurance cover from $5 million to $10 million would add, on average, around $180 per policy per annum, and if applied across the whole industry, about $13 million in total over a 10-year period.[27] However, this does not represent the actual cost to the industry—increased insurance cover means that, other things being equal, insurance companies will meet more liability claims, saving electrical contractors from a larger amount of these payouts. Effectively, a large share of the insurance premiums are returned to the industry through insurance payouts. The net cost *to the industry* is the amount of the insurance premiums retained as profits and transaction costs.

[27] This total figure reflects incremental regulatory costs – i.e., the additional involuntary cost imposed by the regulations – and therefore is based on an additional $180 per year *required* to be paid by all contractors, notwithstanding that some contractors may already hold insurance cover of $10 million or more and therefore face no additional actual cost.

In an efficient market (with perfect information), the profits should compensate the insurance companies for the risk they assume, which offsets the reduction in risk enjoyed by consumers and the industry. However, in the real world, to the extent that the regulation would force a contractor to take out insurance higher than it would otherwise have, there would be efficiency losses.

Increasing the minimum prescribed insurance would also have an impact on competition by preventing some contractors entering the market. However, the impact on competition is expected to be marginal given the number of contractors in the market.

Therefore, overall, increasing the level of minimum insurance coverage will have a net benefit to society only if the resulting increase in safety quality across the industry is larger than the efficiency losses, transaction costs, and restriction on competition. These are difficult to quantify, and would depend on how many businesses would be affected by the change (i.e., the number of businesses not already holding insurance coverage of at least $10 million).

In addition, imperfections in the credit market may result in some businesses, particularly small businesses, adversely affected by an increase in the prescribed insurance minimum due to borrowing or cash flow constraints. Given the additional cost of increasing the insurance cover, this would be expected to be small.

As a relevant comparison, builders[28] and plumbers[29] are generally required to take out coverage of $5 million (of the seven categories of builders only demolishers of high-rise buildings are required to take out public liability insurance coverage at $10 million). In addition, in the VCEC's report, *Victorian Regulatory System 2009*, mandatory insurance for similar professions is in the order of $2 to $5 million.[30] Further, the Victorian Government issues *Good Practice Guidelines: Insurance Provisions and Liability Capping for the Purchase of Goods and Services*, which recommends that $5 million may be appropriate for 'medium' level risk with respect to public liability insurance.[31]

This RIS found that there was insufficient evidence available to clearly demonstrate that the current level provides inadequate protection. Given this, as part of the RIS process ESV is particularly interested in receiving comments concerning the appropriateness of the $5 million level of public liability insurance coverage and whether there is justification for raising the minimum level of coverage to $10 million.

[28] Victorian Government Gazette No S 91, 12 May 2005, Building Practitioners' Insurance Ministerial Order.
[29] Victorian Government Gazette No S 103, 20 June 2002, Licensed Plumbers General Insurance order 2002, see clause 18(a).
[30] Victorian Competition and Efficiency Commission 2009, *The Victorian Regulatory System*, May, p. 43.
[31] State of Victoria, *Good Practice Guidelines: Insurance Provisions and Liability Capping for the Purchase of Goods and Services*, version 2, June 2009, Department of Treasury and Finance, p. 22. Table 1 recommended public liability insurance coverage of $0.5 million to $5 million for 'low' risk, $5 million to $10 million for 'medium' risk, and $10 million to $20 million for 'high' risk.

5.4.2 Parties affected by the proposed Regulations

The parties directly affected by the proposed Regulations are licensed and registered electricians and licensed electrical inspectors. Indirectly, the proposed Regulations affect all consumers and users of electrical work. Accordingly, the indirect impacts of the regulations are very wide-ranging, affecting the whole population of the State.

5.4.3. Direct benefits of the proposed Regulations

Given that a key objective of the Act and proposed Regulations is to promote the safety of electrical work, this section will examine the 'value of a statistical life' (VSL) to provide a general benchmark to compare the benefits associated with reduced harm to human life against the costs of each option.

It is recognised that placing a dollar value on human life is inherently complex, and a range of approaches may be employed. It is also recognised that on a number of grounds the value of a human life may be considered inestimable. However, on public policy grounds a reasoned estimation of the valuation of a human life may assist in providing better regulatory outcomes. For example, a VSL can provide agencies with an estimate of the reduction in fatalities likely to result following the implementation of a particular regulation, or alternatives of regulation (e.g. mandating seat-belts in vehicles, fencing around pools, scaffolding on constructions sites).

The most recent analysis for the Commonwealth Office of Best Practice Regulation found that a VSL estimate of between $3 million and $4 million for avoiding an immediate death of a healthy individual in middle age (about 50 years) or younger was reasonable.[32] Accordingly, a VSL estimate of $3.5 million is adopted for assessment purposes in this RIS.

A key measure of electricity safety is the number of electricity fatalities per year. There has been a reduction in electrical fatalities from an average of 2.49 per million people in 1991 to an average of 1.69 per million people in 2002.[33] The current Regulations have been in place over this period. In the absence of the current Regulations, the annual number of fatalities relating to electrical installation work is expected to be much higher than 1.69 per million people (refer to Section 3 on extent of the problem and the case study below). If the proposed Regulations prevented four deaths per year, the expected benefits of the proposed Regulations, based on the used VSL, would exceed the expected costs.[34]

This assessment is confined to accidental electrical fatalities (see Tables 3.1). However, in practice, the current cost of electrical fires (property loss, litigation, non-fatal personal injury)

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[32] Abelson, P. November 2007, *Establishing a Monetary Value for Lives Saved: Issues and Controversies*, Applied Economics and Department of Economics, Sydney University. Prepared for the Office of Best Practice Regulation, Canberra, p. 21.

[33] DNRE, 2002, ibid., p. 19.

[34] This reflects an average VSL of $3.5 million x 4 lives per year = $14 million, which exceeds the estimated annual cost of the proposed Regulations of $10.6 million per year. Prevention of 3 deaths per year is close to the break even point.

is also considerable. Given that an electricity safety regulatory regime has been in place for decades the counterfactual position is difficult to establish, and therefore an overall estimate of the benefits of the proposed Regulations is inherently difficult. It is reasonably assumed that this cost would be significantly greater in the absence of this proposal.

It is difficult to establish the counterfactual position – that is, the position that would have existed in the absence of any regulations. This is because electricity installation and licensing regulations have been in place in some form in Victoria for nearly 100 years. Indeed, practically all jurisdictional globally regulate electricians and installation to some extent. The case study below is illustrative for several reasons. It indicates the quality of wiring in a country where electrical safety standards are apparently lower than Australia, and demonstrates the negative outcomes that may occur when work is conducted by unlicensed electricians (or when supervision is deficient with respect to work carried out by licensed electricians).

Case Study: The Counterfactual Position – A Clear and Present Danger

Electrical risks at US bases in Iraq worse than reported

Shoddy electrical work by private contractors on United States military bases in Iraq is widespread and dangerous, causing more deaths and injuries from fires and shocks than the Pentagon has acknowledged, according to internal Army documents.

During just one six-month period — August 2006 through January 2007 — at least 283 electrical fires destroyed or damaged American military facilities in Iraq, including the military's largest dining hall in the country, documents obtained by The New York Times show. Two soldiers died in an electrical fire at their base near Tikrit in 2006, the records note, while another was injured while jumping from a burning guard tower in May 2007.

And while the Pentagon has previously reported that 13 Americans have been electrocuted in Iraq, many more have been injured, some seriously, by shocks, according to the documents. A log compiled earlier this year at one building complex in Baghdad disclosed that soldiers complained of receiving electrical shocks in their living quarters on an almost daily basis.

Electrical problems were the most urgent noncombat safety hazard for soldiers in Iraq, according to an Army survey issued in February 2007. It noted "a safety threat theaterwide created by the poor-quality electrical fixtures procured and installed, sometimes incorrectly, thus resulting in a significant number of fires."

In another internal document written after a death, a senior Army officer in Baghdad warned that soldiers had to be moved immediately from several buildings because of electrical risks. In a memo asking for emergency repairs at three buildings, the official warned of a "clear and present danger," adding, "Exposed wiring, ungrounded distribution panels and inappropriate lighting fixtures render these facilities uninhabitable and unsafe." The memo added that "over the course of several months, electrical fires and shorts have compounded these unsafe conditions."

Officials say the administration contracted out so much work in Iraq that companies were simply overwhelmed by the scale of the operations. Some of the electrical work, for example, was turned over to subcontractors, some of which hired unskilled Iraqis who were paid only a few dollars a day.

Edited extract from The New York Times, *Electrical risks at U.S. bases in Iraq worse than reported*, 18 July

2008, viewed 29 November 2009:
http://www.nytimes.com/2008/07/18/world/middleeast/18contractors.html?pagewanted=1&_r=1

By limiting the people able to perform electrical works, the proposed Regulations are expected to be *very effective* in reducing the risks to person and property associated with the installation of electrical equipment, and is therefore given a score of 90 on the first MCA criterion (see below).

5.4.4 Costs of the proposed Regulations for industry

Each of the proposed Regulations was examined for the likely costs they would impose on industry participants.

Regulations that impose administrative costs were examined using the Victorian Standard Cost Model methodology. Data used in the model are based on advice from ESV, the Victorian Competition and Efficiency Commission (VCEC) Guidance Notes, and from information provided by industry stakeholders. Where data were not available, assumptions were made using the best available information.

Each regulation that imposes a burden was costed for Year 1 and then a 10-year Present Value calculation was made to provide a value of the cost of the regulation over its 10-year life. Detailed cost calculations and assumptions are contained in Attachment E and are summarised below in Table 5.3.

Table 5.3: Costs imposed by the proposed Regulations, 10-year assessment period

Regulation	Details of cost	Type of cost	Cost ($'000s)
8	Application for registration	Administrative	308
10	Qualifications for registration as an electrical contractor	Compliance	25,169
13	Prescribed insurance	Financial	49,440
15	Obligations of registered contractors	Administrative	109
16, 18	Cancellation of registration	Administrative	6
20	Electrician's licence	Administrative/compliance	10,557
21	Supervised worker's licence	Administrative/compliance	1,722
24	Electrical switchgear worker's licence	Administrative/compliance	42
25	Restricted worker's licence (Class 1)	Administrative/compliance	1,498
26	Restricted worker's licence (Class 2)	Administrative/compliance	1,498
27	Electrical inspector's licence (G,H,V,M)	Administrative/compliance	279
32	Completion of renewal application	Administrative	1,565

Regulation	Details of cost	Type of cost	Cost ($'000s)
33, 35, 36	Cancellation of licence; change of details; delivery of cancelled card	Administrative	175
Total			**92,367**

* Figures rounded.

The costs imposed by the proposed Regulations on the industry are in the order of $92 million over the ten-year assessment period, or approximately $9.2 million per year.

The administrative and compliance costs of the proposed Regulations would be broadly similar to the current Regulations. This is because while some classes of licences are being streamlined or altered, the fundamental regulatory burden—the eligibility requirements and application processes—are not being changed. Therefore costs associated with completing courses, and time filling out forms and gathering required documents, is unlikely to change under the proposed Regulations. The number of registered contractors and licensees is also expected to be unchanged under the proposed Regulations, meaning that the total administrative and compliance costs are largely unaffected.

At the margin, there may be some savings resulting from the changes in the proposed Regulations. These include:

- Creation of new licence types and streamlining licence classes making it slightly easier for new applicants to navigate the application process
- Increasing the time required for registered contractors to notify ESV of changes to contractor details from 5 days to 10 days (a slight time benefit)
- Use of Restricted worker licences proposed in the national harmonisation framework should lead to efficiencies as other states adopt the recommendations

However, these impacts would be immaterial compared to total quantum of administrative and compliance costs for the industry.

5.4.5 Government administration costs

ESV incurs an annual cost of around $2.5 million in performing registration and licensing functions under the regulations (see Table F7 in Attachment F).

Table 5.4: Government administration costs (10-year present value)

Agency	Cost ($'000s)
Energy Safe Victoria	25,302.7
Total	**25,302.7**

* Figures rounded

Consequently, the cost to the Victorian Government of administering the proposed Regulations has been estimated to be in the order of $25 million (PV) over a ten-year period, or approximately $2.5 million (PV) per annum.

How this cost to government is to be recovered from industry is assessed in section 7 (the

preferred option is full cost recovery).

5.4.6 Total costs of the proposed Regulations

The total costs of the proposed Regulations are shown in Table 5.5 below and are in the order of $118 million over a 10-year period, or approximately $12 million per annum. Averaged over the number of licensed electricians in the State, this represents just under $315 per electrician per year.

Table 5.5: Total cost of the proposed Regulations (10-year present value)

Industry and Government Administrative Costs	Cost ($'000s)
Costs imposed on the industry	92,367
Government administration costs	25,302
Total	**117,669**

* Figures rounded.

5.4.7 Decision criteria

The proposed Regulations were rated highly against the criterion of maintaining and improving the safety of electrical work. This is because, if the proposed Regulations are made, the relevant provisions of the Act would be operative, and only suitable firms and workers would be registered and licensed to undertake electrical work. From a risk-based regulation approach, it is assessed that the proposed Regulations are assessed as very effective, and given a score of +90.

With respect to the criterion of financial, administrative and compliance costs for industry, government and consumers, the total costs are considered moderate. Total direct costs to industry average just under $315 per year for each licensed electrician. Of this cost, the cost of mandatory insurance is expected to be largely offset by less liability payouts made by the industry and reduced risk of non-payment for consumers. This criterion has therefore been assigned a score of –50 (the negative score reflecting that costs are imposed relative to the base case).

For practical and low-cost implementation, the proposed Regulations would be relatively easy to implement as they largely continue the current arrangements. The current framework is well established and well understood, and the changes in administration are incremental. The MCA score is therefore +90.

The proposed Regulations impose restrictions on who may perform certain electrical installation works and therefore have a negative impact on competition compared to the base case (see Section 9 for further discussion of competition impacts of this option). It is scored –50 against this criterion.

The proposed regulations provide flexibility by allowing ESV to recognise equivalent proficiency and experience in granting licenses, mutual recognition of interstate licensing and registration. For restricted worker licences, the proposed Regulations have moved to implement the recommendations to achieve national harmonisation. The proposed Regulations are therefore scored +50 for the last MCA criterion.

Table 5.6: MCA of the proposed Regulations

Criterion	Weighting	Assigned Score	Weighted Score
The persons able to perform electrical works reduce the risks to persons and property associated with installation of electrical equipment	50%	90	45
Financial and compliance costs for industry, government and consumers	15%	-50	-7.5
Practical and low-cost implementation	15%	90	13.5
Low impact on competition	10%	-50	-5
Flexible approach that can facilitate alternative solutions to meet objectives	10%	50	5
Total	**100%**		**51**

5.5 Self-regulation

'Self-regulation' (such as through voluntary codes of conduct) refers to benchmark actions or procedures, as determined by a particular industry or profession, that are generally acceptable within the group and within wider society. Where firms in an industry or members of a profession have accepted mutual obligations under a regime of self-regulation, these obligations are typically described in a code or industry standards. The relevant industry or profession is responsible for enforcement of the associated standards and rules.

The potential benefits of self-regulation can be significant. As major industry participants often set the industry standards, and as self-regulation utilises the expertise, experience and goodwill of those in the industry, firms may be more aware of their obligations, and compliance may be high. For the same reasons, self-regulation may be designed in such a way as to minimise compliance costs, and encourage innovation. Self-regulation also lowers administrative costs for government.

However, under self-regulatory arrangements, enforcement or disciplinary processes may not be transparent. In the event that some industry participants chose to 'go it alone', sanctions may be weak or ineffective. Accordingly, self-regulation is best suited to sectors where the problem to be addressed has a low-risk of occurring or is of low impact, and where deviations from acceptable standards are readily observable.[35]

Under a regime of self-regulation for electrical workers, the industry would set qualification and experience requirements and would monitor and enforce compliance. Such a self-regulatory regime would entail costs that regulations would not, because a self-regulatory regime would have weaker enforcement and less certainty for industry participants. To that extent, there would be greater diversity in compliance and practice under a self-regulatory regime than under the proposed Regulations. Some participants would 'opt out' of the regime altogether.

[35] Department of Treasury and Finance (2007) op cit., B−1 p. 129

Accordingly, under self-regulation there would be additional costs to the community due to greater uncertainty about practices and standards, and inferior safety outcomes. Given the severity of electricity safety risks, and the difficulty in observing deviations from appropriate standards, a self-regulatory scheme would be unsuitable to achieving safety in electrical work.

The costs to the industry of a self-regulated approach are variable, as it would be for the industry to determine the relevant standards and requirements, and the resources and governance provided for this task, administration arrangements, and extent of enforcement activities. For the purpose of this assessment, an indicative scenario is examined where the resources of the industry devoted to self-regulation activities are assumed to be the same in magnitude as the administrative and compliance costs imposed by the proposed Regulations in Option 1. In other words, to enable a meaningful comparison in this RIS, this option has been 'normalised' against the costs of the proposed options, with the different impacts of the option reflected in the other criteria. Therefore, the MCA score for financial and compliance costs will be the same as the proposed Regulations[36], and the differentiation of this option will be revealed in consideration of the impacts on the other criteria.[37]

5.5.1 Decision criteria

As noted above, the MCA criterion for financial and compliance costs is taken as the same for the proposed Regulations—i.e., -50.

For the same amount of resources devoted to regulating the activities of the industry, compliance levels are expected to be significantly lower than under the proposed arrangements, as there would be a lack of meaningful sanctions and electricians could easily opt out. This option is therefore considered only slightly effective in reducing risks (compared to the base case unregulated market), and the first MCA criterion is scored as +25.

The implementation costs of this option are relatively high due to the requirement for industry to develop the new self-regulation regime and establish associated monitoring and enforcement arrangements. It is therefore given an MCA score of –50, reflecting the significant implementation costs to the base case.

This alternative is assessed as having a minimal competition impact of itself, however, it would have significant negative implications for Australia's mutual recognition regime

[36] In this scenario, the costs are entirely financial (the industry resources used up in self-regulation activities) and the administrative and compliance costs (as defined within this RIS) are zero as there are no activities mandated by government.

[37] The choice of this option is designed to compare the relative benefits/other impacts between Option 1 and 2 under the situation where the same amount of industry resources are used up in regulation-type activities. Equally, this option could have used a different scenario, such as industry devoting less resources to regulation activities, resulting in a proportional reduction in expected benefits reflected in the first criterion. There is no evidence to support any particular amount of resources the industry would devote to self-regulation, therefore this 'normalised' approach has been used for comparison.

(Victorian electricians would not be able to operate in other states), and therefore a score of -10 is assigned.

This option would be relatively flexible, as a self-regulated approach could adapt to changes as it needed, without having to change legislative or regulatory instruments. That said, depending on the system set up, changes may require some form of agreement across the industry, which may be difficult to achieve in practice. A self-regulated model may also be reluctant to changes in community standards where the change would require additional costs for the industry to provide net benefit to the community. Overall, this option is scored zero on this criterion; as businesses can easily opt out of the system, this option is very similar to the base case, where unregulated electricians would be left to their own devises as to how they response to changing needs.

Overall, the MCA assessment results in a net score of -3.5.

Table 5.7: MCA of self-regulation

Criterion	Weighting	Assigned Score	Weighted Score
The persons able to perform electrical works reduce the risks to persons and property associated with installation of electrical equipment	50%	25	12.5
Financial and compliance costs for industry, government and consumers	15%	-50	-7.5
Practical and low-cost implementation	15%	-50	-7.5
Low impact on competition	10%	-10	-1
Flexible approach that can facilitate alternative solutions to meet objectives	10%	0	0
Total	**100%**		**-3.5**

5.6 Negative licensing

Negative licensing is designed to ensure that individuals or businesses, who have demonstrated by their prior action that they are incompetent or irresponsible, are precluded from operating in a particular industry. For example, a person convicted of breaching the Act or relevant standards could be prohibited from working in the industry.

The advantage of this approach is that those with a poor track record of breaching the Act or standards could be either barred from the industry or closely monitored. The main disadvantage of this alternative is that, in the absence of the current Regulations or an analogous regime of registration and licensing, some participants may be able to operate undetected or act inappropriately before they are detected. For inherently risky activities such as electrical installation work, it would be undesirable to incur severe injuries or even death in order to identify incompetent or irresponsible market participants.

A practical regime of negative licensing would still involve registration to enable the regulatory authority to effectively monitor and assess performance. The alternative—allowing any person to undertake electrical work and relying on consumer complaints of reported accidents to occur before practitioners are assessed—is not a sensible option in this area

where a high level of risk has been identified in relation to electrical installation work.

The administrative and compliance burden of a "pure registration" regime would essentially reflect the costs associated with the proposed Regulations, excluding the cost associated with completing the relevant contractors business course and electricians assessment course. This would be a cost to industry of around $82 million over ten years (present value)[38], or around $8 million per annum. (The actual cost would probably be higher as removal of the need to demonstrate competence may encourage more people to enter the market.)

The costs to government are expected to be higher, as greater effort would be required to detect unacceptable performance and undertake assessments.

There are high risks associated with injury and property damage under this option. Firstly, negative licensing is not designed to prevent incidents per se, but to prevent *repeated* incidents. Secondly, once a person has been disentitled to practise as an electrician, it would be difficult to ensure they do not continue to perform that work. Thirdly, there may be incentive to not report electrical incidents, thereby not effectively addressing safety quality.

5.6.1 Decision criteria

The option of negative licensing rates poorly with respect to minimising risks of electrical work. While better than the base case, there are ineffective controls in place to provide reasonable assurance that work will be performed safely. Essentially, electricians would be able to demonstrate their competence by simply 'having a go at it' without any prior required theoretical or practical training. This options scores 10 against the first MCA criterion.

As noted above, the costs to industry could be slightly less than the proposed Regulations, although likely to be more due to more people entering the market. However, costs to government would need to be substantially higher than under the proposed Regulations. Therefore, this option scores –70 on the cost criterion.

Implementation costs would primarily involve developing the new regulatory provisions, and informing industry about the new regime. This would involve similar costs to the previous option, and possibly a small statutory board could be set up under ESV (similar to the Building Practitioners Board in relation to the building industry). A significant cost of implementation would involve having to inform consumers about the changes, and in particular that electricians are no longer licensed and explanation of the new risks. That said, these costs would be less than the base case (i.e., informing the community about a completely unregulated market). Overall, this option is scored +10 on this MCA criterion.

This alternative would of itself have minimal competition impact (compared to the base case), however, compared to the current (and proposed) arrangements, a Victorian electrician would

[38] This estimate is based on the administrative/compliance burden of the proposed regulations ($92 million 10-year PV, see Attachment E) minus the estimated costs (actual costs and time costs) in that total associated with completing the relevant course/assessment for contractors and electrical workers ($35m), plus the estimated costs to Government ($25m).

not be recognised in other jurisdictions. Consequently a score of -5 is assigned to this criterion.

The conditions for which a person would be prevented from practising would be spelt out in legislative or regulatory instrument. A score of 10 is assigned for flexibility.

This MCA assessment results in a net score of -4.

Table 5.8: MCA of negative licensing

Criterion	Weighting	Assigned Score	Weighted Score
The persons able to perform electrical works reduce the risks to persons and property associated with installation of electrical equipment	50%	10	5
Financial and compliance costs for industry, government and consumers	15%	-70	-10.5
Practical and low-cost implementation	15%	10	1.5
Low impact on competition	10%	-10	-1
Flexible approach that can facilitate alternative solutions to meet objectives	10%	10	1
Total	**100%**		**-4**

6. PREFERRED OPTION

On the basis of the analysis in Section 5, this RIS concludes:

- on the basis of the multi-criteria assessment, the proposed Regulations received a positive overall score, indicating that they are assessed as cost-effectively meeting the desired objectives (as defined by the criteria and weightings) compared to the base case (i.e., of not regulating persons able to undertake electrical installation works);

- the proposed Regulations meet the desired objectives more cost-effectively than any practicable alternative.

Table 6.1: Summary of MCA scores of assessed options

Option	MCA score
Base case scenario	**0.00**
Proposed Regulations	**51.00**
Self Regulation	**-3.50**
Negative licensing	**-4.00**

In terms of absolute benefit to society, it is noted that the costs of the proposed Regulations ($12 million per year) is less than the expected benefits if the effect of the Regulations saves 4 lives per year. Given historical data on fatalities from electrical accidents and comparison with other jurisdictions, it is very likely that the proposed Regulations would be expected to achieve this benefit. In practice, the benefits would be realised as reduced injuries and property damage as well as prevented deaths.

This assessment is made on the basis that the proposed Regulations provide the most effective and efficient measure to promote safety of electrical work. The main disadvantages with the alternatives are associated with the achievement of the safety objectives of the Act.

The costs imposed by the proposed Regulations on the industry are in the order of $92 million (PV) over the ten-year assessment period, or approximately $9 million per year. The costs imposed on the government are $2.5 million per year.

In addition, the proposed Regulations represent the most appropriate regulatory mechanism by which fees can be prescribed, thus satisfying the general government policy that regulatory fees should be charged to ensure that both efficiency and equity objectives are met. (Fees are discussed in Section 7.)

7. FEES

Current fees have not been increased since they were introduced in 1999 due to no formal review being undertaken, and the fees being set prior to the Government's policy on fee indexation. The sunsetting of the regulations provides a timely opportunity to update the fees to ensure consistency with Government policies.

7.1 Fee setting principles

In September 2007, the Victorian Government released its Cost Recovery Guidelines to clarify its policy principles underpinning cost-recovery arrangements.[39] The Guidelines establish a whole-of-government framework thereby ensuring that cost-recovery arrangements in Victoria are transparent, efficient, effective and consistent with legislative requirements and government policy. These Guidelines are based on the principle that properly designed cost-recovery arrangements can deliver both equity and efficiency benefits to the community.

Cost-recovery may be defined as the recuperation of the costs of government-provided or funded products, services or activities that, at least in part, provide private benefits to individuals, entities or groups, or reflect the costs imposed by their actions. The Guidelines apply to cost-recovery arrangements of government departments and general government agencies and include the recovery of the costs incurred by government in administering regulation (e.g. registration, licensing, issuing of permits, monitoring compliance, investigations, enforcement activity, etc).

As stated in the *Cost Recovery Guidelines*, general government policy is that regulatory fees and user charges should generally be set on a full cost-recovery basis, however if it is determined that full cost-recovery is not consistent with other policy objectives of the Government, then it may not be appropriate to introduce a full cost-recovery regime. Consideration may be given to a regime of partial cost-recovery (if it can be demonstrated that a lower than full cost-recovery does not jeopardise other objectives) and/or to rely on other funding sources (e.g. general taxation) to finance the government activity.

7.2 Cost-recovery options

When designed and implementing appropriately, the adoption of cost recovery has the potential to advance efficiency and equity objectives. However, the Guidelines note that "efficiency and equity considerations may need to be balanced against each other in determining the appropriate form of cost recovery".[40]

As mentioned above, while the Victorian Government's general policy is that fees should be set on a full cost-recovery basis, there are nevertheless situations where it may be desirable to

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[39] Department of Treasury and Finance, 2007, *Cost Recovery Guidelines: Incorporating the information formerly published in the Guidelines for Setting fees and User-Charges Imposed by Departments and Central Government Agencies*, Melbourne.

[40] ibid., p. 5

recover at less than full cost, or not to recover at all. These include circumstances where social policy or equity considerations are considered to outweigh the efficiency objectives associated with full cost recovery, and/or where full cost-recovery might adversely affect the achievement of other government policy objectives. Therefore, following feasible fees options were considered:

- Option A – full cost-recovery (relevant fee based on 100 per cent of the average costs (both direct and indirect));
- Option B – partial cost-recovery (e.g. 50 per cent recovery);
- Option C – zero cost-recovery (this option is similar to the 'base case' because if the proposed fee regulations are not remade then no fees would be prescribed).

Multi-criteria analysis (MCA) was used to assess the preferred fee option. Reflecting the Government's *Cost Recovery Guidelines*, the criteria used were:

- *Efficient* – fees set at a level to promote the efficient allocation of resources;
- *Effective* – fees set at a level to achieve the government's policy objective; and
- *Equitable* – fees set at a level to promote the sharing of costs and benefits across society.

Accordingly, the 'efficiency' and 'effectiveness' criteria were each assigned a weighting of 35 per cent reflecting their overall importance in achieving the Government's policy objectives in relation to fee setting, while the 'equity' and criterion was assigned a weighting of 30 per cent.

7.2.1 Impact of fees

The major economic impact of regulatory fees is that they add to the cost of industry participants. At the margin, this may deter potential practitioners from participating in the industry. The key benefit of collecting fees is that they recover the cost from the direct beneficiary of the regulated activity. Table 7.1 below summarises the benefits and costs associated with the proposed fees.

Table 7.1: Benefits and costs of the fees

Benefits	Costs
• Cost-recovery from the direct beneficiaries of the regulation. • Fee levels in line with government policy, and promotes efficiency and equity. • Removes subsidies and cross-subsidies.	• Increase costs for consumers and businesses. • Processing costs for the government. • May potentially discourage some businesses and consumers.

7.2.2 Option A – Full cost-recovery

As mentioned earlier, the Cost Recovery Guidelines state that the general government policy is that regulatory fees and user charges should be set on a full cost-recovery basis. In this case, full costs represent the value of all the resources used or consumed in the provision of registration and licensing, and the associated monitoring and compliance arrangements.

A departure from full cost-recovery would result in the Victorian community providing a small subsidy to the electricity industry. However, full cost-recovery may deter some individuals from participating in the industry if the perceived benefits of fees do not outweigh the fee costs. It should also be noted that the current fees have not been increased since they were introduced in 1999.

Given that full cost-recovery is the most economically efficient option for fee levels and fully achieves the Government's objective on efficiency grounds, a maximum score of 100 is assigned to this criterion. In terms of 'effectiveness', if fee levels are set too high it may result in non-compliance. There is a risk that this could jeopardise the government's policy objective of promoting safety. Given the overall level of the fees, this is considered unlikely (based on current experience) however a score of 60 is assigned to take account of this risk. A score of -50 is assigned to the equity criterion because the fees are not based on a person's or business's ability to pay (known as 'vertical equity'). This results in a net score of +41.0.

Table 7.2: MCA of Option A

Criteria	Weighting	Assigned Score	Weighted Score
Efficient	35%	100	35.00
Effective	35%	60	21.00
Equitable	30%	-50	-15.00
Total	**100%**		**+41.00**

* Figures rounded

7.2.3 Option B – Partial cost-recovery

Partial cost-recovery seeks to balance the efficiency objective against the equity objective, while ensuring that the government's overall policy objectives are not jeopardised. The efficiency criterion is positive because industry participants would still make a contribution towards funding the regulation of the industry. However, given that this departs from the government's general policy of full cost-recovery, a score of 50 is assigned. The effectiveness and equity criteria receive a higher score (75) than the full cost-recovery option because the lower cost is less likely to discourage compliance. Given that the cost is less than zero a negative score of 25 is assigned. This results in an MCA score of +36.25.

Table 7.3: MCA of Option B

Criteria	Weighting	Assigned Score	Weighted Score
Efficient	35%	50	17.50
Effective	35%	75	26.25
Equitable	30%	-25	7.50
Total	**100%**		**+36.25**

* Figures rounded

7.2.4 Zero cost recovery - The 'base case'

If no fees were recovered this situation would be similar to the 'base case'. That is, if the regulations were not remade then no fees would be prescribed. This situation is analogous to the base case and therefore a score of zero is assigned to each criterion, resulting in a net score of zero.

Table 7.4: MCA of Option C

Criteria	Weighting	Assigned Score	Weighted Score
Efficient	35%	0	0
Effective	35%	0	0
Equitable	30%	0	0
Total	**100%**		**0**

7.3 Assessment of cost and benefits

All fee options were assessed as being superior to the base case, i.e. zero cost-recovery. Assessed against the criteria of efficiency, effectiveness and equity shows that full cost recovery (Option A) based on recovery of the administrative costs associated with licensing and registration receives the highest net score and is hence the preferred option.

Table 7.5: Summary of MCA of Fee Options

Regulatory Proposal	MCA Assessment
Option A: Full cost-recovery	**41.00**
Option B: Partial cost-recovery	**36.25**
Option C: Zero recovery	**0.00**

It should noted that to provide administrative fairness (equity) proposed Regulation 38 permits ESV to rebate the payment of an application fee for the issue or renewal of a licence for an electrical installation worker or for registration for an electrical contractor if the licence is to be issued for a period of less than 5 years. In addition, proposed Regulation 39 permits ESV to refund part of the application fee for the issue or renewal of a licence for an electrical installation worker if the licence is to be cancelled for the issue of a licence of another class.

7.4 Calculation of the proposed fees

The proposed Regulations include fees for registration of electrical contractors and licensing of electrical workers. The fees in Table 7.6 below were calculated on a cost recovery basis in relation to evaluating and processing the licences. These tasks were examined and the cost of staff time (plus overheads) in undertaking these activities was established. A detailed description and cost calculations is contained in Attachment F.

These calculations resulted in some of the fees increasing by a significant percentage. These increases are based on an examination of the tasks required for processing the licences, and hence the increases (ranging from -36 per cent to 153 per cent) were not uniform. However, such increases are from a low base and it is noted that the fees have not increased since 1999.

Table 7.6: Proposed Fees

Description	Current fee ($)	Proposed fee ($)	% Change (nominal)	% Change (real*)
Registered electrical contractor				
Application fee for registration of electrical contractor (shown on annual basis)	240	**101****	-58%	-68
Application fee for renewal of registration of electrical contractor	170	**243**	43%	5%
Copy of the register	150	n.a.	–	–
Extract from the register	25	**32**	28%	-6%
Issue of duplicate registration card	50	**32**	-36%	-53%
Application fee for examination	180	n.a.	–	–
Licensing of electrical workers** (5 yearly fees)				
Application fee for issue of licence for a **restricted** electrical installation worker	200	**506**	153%	85%
Renewal of licensed for a **restricted** electrical worker	130	**243**	87%	37%
Application fee for issue of licence for an electrical installation worker	n.a.	**324**	62%	19%
Renewal of licensed electrical worker	n.a.	**162**	25%	-19%
Application fee for issue of licence for an electrical inspector	240	**506**	111%	54%
Application fee for renewal of licence for an electrical inspector	170	**243**	43%	5%
Issue of duplicate written licence	50	**32**	-36%	-53%
Application for examination for licensing	180	n.a.	–	–

*Percentage change (constant) –June 1999 – Index 122.3, June 2009 – Index 167.0 (CPI), increase 36.5%. Australian Bureau of Statistics, Cat, 6401.0 - Consumer Price Index, Australia, Tables 1 and 2. CPI: All Groups, Index Numbers and Percentage Changes

** The fee for a Registered Electrical Contractor is shown in annual terms. Renewal of registration will eventually occur on a 5-yearly basis, and thus will be in the order of $506.

*** Currently, licences have a duration of 5 years. This period will remain under the proposed Regulations. Therefore the fees shown above for licensing of electrical worked relate to a 5 year period.

The proposed fees are expected to generate total revenue of $30.7 million over ten years (nominal), compared to an estimated $18.3 million if the current fee levels were continued. Therefore, the proposed fees will increase revenue by approximately $12 million over ten years.

8. CHANGE IN THE ADMINISTRATIVE BURDEN

The *Reducing the Regulatory Burden* initiative commits the Victorian Government to reducing the administrative costs of regulation. Accordingly, this RIS uses the Standard Cost Model (SCM) methodology and *Measurement of Changes in Administrative Burden* to inform its cost–benefit analysis and to measure any changes to the administrative costs. For the purposes of the measurement of change in the administrative burden, the existing burden forms the base case against which the change is measured.

Administrative costs are those costs incurred by business to demonstrate compliance with the regulation or to allow government to administer the regulation (e.g., keeping a register, lodging documents with government, or reporting requirements). The SCM is used solely to measure the administrative costs of regulation. It is not currently used to measure substantive compliance costs. Similarly, costs to government of administering and enforcing the proposed Regulations are not subject to the SCM assessment.

As stated earlier, the proposed Regulations remake the current Regulations with minimal changes, and **establish no new reporting or information obligations**. A Statement of No Material Impact is contained in Attachment G.

9. COMPETITION IMPACTS

Victoria's electricity safety arrangements have not been subject to a National Competition Policy Review. It is noted, however, that the current regulatory regime, including the establishment of ESV, was established in concert with the wide-ranging reform of Victoria's electricity industry and market upon privatisation.

At the Council of Australian Governments (COAG) meeting in April 1995 (reaffirmed in April 2007), all Australian governments agreed to implement the National Competition Policy (NCP). As part of the *Competition Principles Agreement*, all governments, including Victoria, agreed to review all legislation containing restrictions on competition under the following principle:

> The guiding principle is that legislation (including acts, enactments, ordinances or regulations) should not restrict competition unless it can be demonstrated that:
>
> (a) The benefits of the restriction to the community as a whole outweigh the costs; and
>
> (b) The objectives of the regulation can only be achieved by restricting competition.

To successfully pass the competition and cost-benefit tests (see Attachment H), for each proposed regulation it is necessary to:

> Step 1: Identify the restriction on competition, if any;
>
> Step 2: Show that the restriction, if any exists, is necessary to achieve the objective;
>
> Step 3: Assess the costs to the community caused by the restriction;
>
> Step 4: Assess the community benefits; and
>
> Step 5: Assess whether benefits outweigh the costs.

If no restriction on competition is found in the course of Step 1, it is not necessary to complete the remaining steps (that is, Steps 2 to 5). Issues to be discussed in the NCP assessment relate to whether or not the proposed regulations restrict competition in the relevant market by one or more of various means such as:

- allowing only one company or person to supply a good or service;
- requiring producers to sell to a single company or persons
- limiting the number of producers of goods and services to less than four;
- limiting the output of an industry or individual producers; or
- limiting the number of persons engaged in an occupation.

The proposed Regulations were assessed against the steps above, and the analysis of alternatives included consideration of competition impacts. The proposed Regulations were found to impose restrictions on competition, with regard to **entry** into various categories of electrical work. However, the justification of these restrictions is well-established on ensuring

that electricians possess a minimum level of skill and competence. This is recognised across Australia and all other jurisdictions impose similar entry requirements to the industry.

Therefore, the benefits to the community as a whole of the restrictions on competition are expected to significantly outweigh the costs. The benefits arise primarily in the form of improved safety of electrical installation work, and concomitant reductions in healthcare costs and property damage.

The proposed Regulations restrict competition with regard to entry into various categories of electrical work, however:

- the benefits of the restriction to the community as a whole outweigh the costs; and
- the objectives of the proposed Regulations can only be achieved by restricting competition.

10. SMALL BUSINESS IMPACT

The *Victorian Guide to Regulation* provides a definitive guide to developing regulation in Victoria within the context of the Government's vision of well targeted, effective and appropriate regulation. As noted earlier, all new regulatory proposals that have significant impacts on business must be thoroughly assessed to ensure the benefits to the community outweigh the costs and that the best option is considered. The *Guide* recommends a special assessment of the impact of the proposed Regulations on small businesses, recognising that the compliance burden often falls disproportionately on that sector of the economy. [41]

Electrical installations work is primarily carried out by small businesses. Most RECs and LEIs, for example, are sole traders, or businesses with fewer than 20 employees. Accordingly, the impact of the proposed Regulations will fall almost entirely on small business.

[41] The ABS defines a 'small business' as a business employing fewer than 20 people. ABS Cat. 1321.0 - Small Business in Australia.

11. IMPLEMENTATION, ENFORCEMENT AND COMPLIANCE

ESV will implement the proposed Regulations through the well established and understood processes. Changes from the current Regulations will be highlighted online, and information will be sent to all current registered contractors and licensed workers through existing regular communication channels.

The proposed Regulations include transitional provisions:

- Existing licenses for Occupiers and Electrician (Supervised) Workers will continue until their expiry, and may be renewed before they expire.
- A person who is the holder of a Disconnect/reconnect licence issued under regulation 304 of the old Regulations will be taken to hold a Restricted electrical worker's licence (Class 2) until the expiry date of the licence, and may be renewed before they expire of that license.
- Abolished classes of inspectors licences will continue until their expiry. Class "L" inspectors licences will continue until expiry with slightly modified work description. A Class "L" inspectors licence may be renewed before it expires.

The enforcement and compliance regime under the proposed Regulations would be a continuation of the regime under the current Regulations. Offences exist in relation to the following provisions of the proposed Regulations:

- Obligations of registered contractors (regulation 15);
- Registration cards (18);
- Mutual recognition (30);
- Change of name or address (35);
- Licence cards (36); and
- Production of licence on demand (37).

Under regulation 40 (Provisions under which infringement notices may be served), regulations 18(3)(a), (3)(b) and (4), 30(3), 35, 36(3) and (4), and 37 are prescribed provisions. These are shown in Table 11.1 below.

Table 11.1: Proposed Infringement Penalties

Regulation	Descriptions	Penalty Units	Value ($)
15(1) to (3)	Notification requirements of registered contractors	5	57
18(3)(a) & (b)	Registration cards must be signed	10	113
18(4)	Cancelled registration cards to be delivered to ESV	10	113
30(3)	A person taken to be licensed under mutual recognition arrangements must notify ESV after any change in that person's name, address or status of the license or authority they hold.	20	227
35	The holder of a licence must notify ESV after any change in that person's name or address.	10	113
36(3)	Licence cards must be signed	10	113
36(4)	Cancelled licence cards to be delivered to ESV	10	113
37	Licence must be produced on demand to an enforcement officer	10	113

Note: Values are approximate. A penalty unit from 1 July 2009 to 30 June 2010 is $116.82. Infringement notices issued under the Electricity Safety Act must be one-tenth of the maximum monetary penalty fixed by that provision (see: Section 140D).

In 2007-08, ESV completed successful prosecutions against 60 companies and individuals for 279 offences breaching the *Electricity Safety Act* and *Gas Safety Act* and associated regulations. Of these successful prosecutions, prosecutions were initiated against 43 Electrical Contractors/Workers.

Penalties included 30 undertakings to be of good behaviour, 22 fines without conviction and 10 fines with conviction. Fines totalling $60,600 were imposed and costs against defendants of $74,914.72 were awarded to ESV as a result of the court actions.

ESV expects a broadly unchanged level of compliance under the proposed Regulations, and the same costs of enforcement.

12. CONSULTATION

The following organisations and entities were consulted in relation to the proposed Regulations:

- NECA Executive Council;
- NESMA (National Electrical Switchboard Manufacturer's Association)
- NECA information sessions (eight sessions, and a total of approximately 500 contractors participating);
- ETU;
- Institute of Electrical Inspectors;
- Victorian Customer Electrical Safety Committee;
- Distribution Businesses – New Connection Forum; and
- TAFE conference for managers and administrators of electrical programs.
- SIRF Industrial Maintenance Roundtable Victoria and Tasmania.

Steps were taken to communicate with the industry as a whole. For example, articles on possible options were published in the 'Energy Safe' magazine (Energy Safe Autumn/Winter Issue 12), which is circulated to all LEIWs in the State. Correspondence was received from RECs and LEIWs in relation to the options and the proposed Regulations.

As a result of consultation (a newsletter article and ESV presentation) several changes were made to the proposed Regulations when they were being formulated. Correspondence was received from several stakeholders concerning a proposal to include electrical work at Extra Low Voltage (ELV) in Hazardous Areas as Prescribed/Non Prescribed work for the purposes of the Act. Stakeholders considered that this proposal would add significant compliance costs with no tangible safety benefit. Consequently this proposal was removed from the proposed Regulation.

In addition, an experience requirement of 5 years was considered in relation to inspectors' licences. However, it was considered that a more flexible approach would be to "demonstrate experience, proficiency and competence" in the relevant matters set out in Part B of Schedule 3.

However, in formulating the proposed Regulations stakeholders were not broadly consulted with respect to the level of fees. This RIS provides you with the opportunity to provide your comments to ESV.

There is further scope for industry participants and other stakeholders to comment on the proposed Regulations before their finalisation. The *Subordinate Legislation Act 1994* requires that the public be given at least 28 days to provide comments or submissions regarding the proposed Regulations. Given that the regulations are being remade and the changes mostly relate to streamlining and simplifying registration and licensing, the consultation period for this RIS will be 28 days, with written comments required by no later than **5.00pm, 25 March, 2010**.

13. CONCLUSION

This Regulatory Impact Statement concludes that:

- the likely magnitude of the benefits to society of the proposed Regulations exceed the costs;
- the net benefits of the proposed Regulations are greater than those associated with any practicable alternative;
- the proposed Regulations impose restrictions on competition, but the benefits of the restriction to the community as a whole outweigh the costs; and
- the proposed Regulations will not lead to a material increase in the administrative burden on industry.

* * * * *

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Attachment A

AUTHORISING PROVISION UNDER THE ELECTRICITY SAFETY ACT 1998

156 Electrical contractors and electrical workers

The Governor in Council may make regulations for or with respect to—

(a) the qualifications (including courses of training and examination, re-examination, assessment and re-assessment) required for registration of electrical contractors or any class of electrical contractors;

(b) the registration of electrical contractors including the conditions under which registration will be granted;

(c) reasonable fees to be paid—

(i) for the registration of electrical contractors;

(ii) for the renewal of registrations;

(d) the suspension or cancellation of the registration of any electrical contractor and the restoration of the registration of any electrical contractor whose registration has been suspended or cancelled.

(e) grades and standards of qualification and competence of electrical workers and their duties;

(f) the examination, assessment, grading and licensing of electrical workers and applications for and the issue and variation of licences, including the conditions and restrictions to which licences are subject;

(g) the expiry, renewal, cancellation and suspension of licences;

(h) prescribing forms of licences;

(i) prescribing periodic or other tests of the competence of electrical workers for carrying out electrical work;

(j) reasonable fees to be paid for applications for licences and any assessment or any theoretical or practical examination in electrical work and refunds of fees.

157 General regulation making powers

(1) The Governor in Council may make regulations for or with respect to—

(a) fixing fees and charges, including maximum or minimum fees and charges, for or with respect to any function or service carried out by ESV;

(b) empowering ESV to waive or rebate the payment of a fee or charge in specified circumstances or to refund amounts paid to ESV in specified circumstances;

* * * * *

(d) forms for the purposes of this Act or the regulations;

* * * * *

(f) the keeping of records;

(g) the conducting of tests;

(h) any other matter or thing required or permitted by this Act to be prescribed or necessary to be prescribed to give effect to this Act.

(2) Regulations made under this Act may be made—

(a) so as to apply—

(i) at all times or at a specified time; or

(ii) throughout the whole of the State or in a specified part of the State;

(aa) so as to apply generally or to be of limited application and may differ according to differences in circumstances;

(b) so as to require a matter affected by the regulations to be—

(i) in accordance with a specified standard or specified requirement; or

(ii) approved by or to the satisfaction of a specified person or body;

(c) so as to incorporate, adopt or apply wholly or partially or as amended by the regulations, the provisions of any document, standard, rule, specification or method formulated, issued, prescribed or published by any authority or body whether—

(i) as formulated, issued, prescribed or published at the time the regulation is made or at any time before the regulation is made; or

(ii) as amended from time to time;

(d) so as to confer a discretionary authority on or leave any matter to be determined by a specified person or body;

(e) so as to empower ESV to exempt any person, electrical work or electrical equipment from all or any of the requirements of the regulations subject to conditions (if any) specified by ESV.

(3) The regulations may impose a penalty not exceeding 20 penalty units for a breach of a regulation.

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Attachment B

DESCRIPTION OF PROPOSED ELECTRICITY SAFETY (REGISTRATION & LICENSING) REGULATIONS 2010

Part 1 — Preliminary: Regulations 1 to 7

Regulations 1 to 7 are of a machinery nature and set out the objectives, authorising provisions, definitions and classes of electrical work.

Regulation 1 sets out the objectives of the proposed Regulations, which are to provide for the registration of electrical contractors, to provide for the licensing of electrical workers, prescribe fees, penalties and other matters authorised by the *Electricity Safety Act 1998*, to prescribe certain provisions of the Regulations that create offences as provisions in respect of which infringement notices may be served, and to make a related consequential amendment to the Electricity Safety (Infringements) Regulations 2000 and the Electricity Safety (Installations) Regulations 2009.

Regulation 2 sets out the authorising provisions for the making of the regulations under sections 152, 156 and 157 of the *Electricity Safety Act 1998*.

Regulation 3 revokes the regulations contained in Schedule 1.

Regulation 4 sets out definitions for 'applicant', 'Australian/New Zealand Wiring Rules', 'Australian regulatory authority', 'AS/NZS 3003', 'effective supervision', 'electrical contractor', 'electrical switchgear fitting work', 'fault finding', 'hazardous area', 'high voltage', 'licensed electrician', 'licensed electrical switchgear worker', 'low voltage', 'part 1 solution', 'switchgear and control gear assembly', 'nominated business supervisor', 'nominated technical supervisor', 'patient area', 'primary work function', 'regulatory authority' and defines the Act as meaning the *Electricity Safety Act 1998*.

For the purposes of Division 1 of Part 3 of the Act, **Regulation 5** provides that any contracting or undertaking to carry out electrical installation work of a class prescribed by regulation 6 is a prescribed class of work.

For the purposes of Division 1 of Part 3 of the Act, **Regulation 6** provides that a prescribed class of electrical work is the installation, alteration, repair or maintenance of an electrical installation ordinarily operated at low voltage or a voltage exceeding low voltage in any area, or at any voltage in a patient area.'.

Regulation 7 prescribes various classes of electrical installation work for the purposes of Division 2 of Part 3 of the Act.

Part 2 — Registration of Electrical Contractors: Regulations 8 to 18

Regulations 8 and **9** set out the processes and requirements for registration of an electrical contractor. An applicant may be registered or have their registration renewed if they are

responsible for the effective supervision of electrical installation work or can nominate a sufficient number of technical supervisors who will be responsible for the supervision of the electrical installation work.

Regulation 10 sets out the qualification requirements for a person to undertake effective supervision of electrical installation work, a person to undertake effective supervision of electrical switchgear fitting work, and a person to be responsible for the business management and administration of the electrical contracting work.

Regulation 11 states that applicants from interstate or New Zealand who satisfy the standards contained in Regulation 9 and 10 may be registered under the Mutual Recognition arrangements.

Regulation 12 lists the grounds upon which ESV may refuse to register or renew the registration of an applicant. These include an inability to effectively supervise electrical installation work or where the applicant has failed to comply with the Act or regulations relating to the installation and operation of electrical installations. In addition, ESV may also refuse registration in cases where a person attempts to obtain registration by fraud, misrepresentation or concealment of facts, or they have a conviction of fraud, dishonesty, drug trafficking or violence.

Regulation 13 prescribes the minimum level of public liability insurance required by the electrical contractor in connection with the electrical contracting work for personal injury or property damage. The minimum public liability insurance level is $5 million.

Regulation 14 sets out the conditions of registration for electrical contractor. If the electrical contractor is licensed and qualified (as per Regulation 10(1)) then they are responsible for supervising all electrical installation work not completed by themselves or nominating technical supervisor/s to do so, and ensuring that the business and administration is managed by the nominated business supervisor.

Regulation 15 sets out the obligations of registered contractors. A registered electrical contractor must notify ESV in writing within 10 business days of any change in the information provided in the application for the original registration or for the most recent renewal of the registration. Infringement penalties apply for failure to notify ESV of those occurrences mentioned in this regulation.

Regulation 16 provides for ESV to be able to cancel the registration of an electrical contractor who applies for a cancellation, and requires ESV to cancel registration of an electrical contractor who fails to apply for a registration renewal by the renewal date.

Regulation 17 states that under section 33(2) the Act, an electronic register must be kept, and specifies the information to be recorded on the register about each registered electrical contractor.

Regulation 18 sets out the conditions for the contractor regarding the registration cards issued by ESV, and the penalties for failure to sign or have signed by a body corporate if applicable, the registration card. A person must also return the registration card within 10 business days

after the contractor is notified of registration cancellation. The contractor may receive a replacement registration card if lost or damaged on payment of a fee set of 2.8 fee units (i.e., $33).

Part 3 — Issue, renewal and cancellation of licences: Regulations 19 to 33

Regulation 19 establishes arrangements for applications for licences for electrical worker's licences. These regulations prescribed the information to be submitted to ESV including personal particulars, work experience, and training and qualifications. These regulations also prescribe the fees for an electrical worker's licence (27.8 fee units) and the fee for a restricted electrical worker's licence or an Electrical inspector's licence (43.3 fee units).

Regulation 20 provides for ESV to license an 'electrician' to carry out all electrical installation work described in Regulation 7(a). The electrician must have completed four years of training as an electrician, inclusive of 12 months experience in electrical installation work, and have successfully completed Certificate III in Electrotechnology Electrician and Licensed Electricians Assessment (LEA), or be deemed by ESV to hold equivalent qualifications, proficiency and experience in electrical installation work.

Regulation 21 provides for ESV to license a 'supervised worker' under the supervision of a licensed electrician to carry out all electrical installation work described in Regulation 7(a). The supervised worker's licence may not exceed three years in duration. The supervised worker must have either completed 4 years of training as an electrician inclusive of 12 months experience in electrical installation work or completed 4 years of training as an electrical fitter; have successfully completed Certificate III in Switchgear and Controlgear and a practical examination in safe work practices conducted by ESV (or approved examining body).

Regulation 22 provides for ESV to license a person to carry out all electrical installation work of the class prescribed in regulation 7(a) under the effective supervision of a licensed electrician and installation work of the class prescribed in regulation 7(c) (without supervision). This is known as an Electrician (Supervised) Worker's licence. Note: No new Electrician (Supervised) Licences may be issued.

Regulation 23 provides for ESV to issue an 'occupier's licence' to a person to carry out all electrical installation work of the class prescribed in regulation 7(a) that is limited to premises which the person to be licensed occupies for residential purposes. Note: No new Occupier's Licences may be issued.

Regulation 24 provides for ESV to issue an 'electrical switchgear worker's licence' to a person to carry out electrical installation work of the class prescribed in regulation 7(a) limited to the assembly, alteration, repair and maintenance of switchgear and control gear assemblies. Note: This licence is not required for the manufacture (off-site) of switchgear and controlgear assemblies.

Under **Regulations 25** and **26**, a person may apply for a restricted electrical worker's licence (Class 1 or Class 2) to carry out specified categories of restricted electrical work.

Regulation 27 provides for ESV to issue an Electrical inspector's licence to a person to carry out electrical inspection work of any or all of the classes (except class "L") prescribed in Part A of Schedule 3 if that person has demonstrated to the satisfaction of ESV the qualifications, experience, competence and proficiency in the matters set out in Part B of Schedule 3 for the relevant class of electrical inspection work; and if required by ESV to do so, has satisfactorily completed a practical examination in electrical inspection work conducted by ESV or a body approved by ESV; or the person's standard of qualifications, proficiency and experience in electrical installation work is at least of an equivalent standard.

Regulation 28 provides that ESV may license a person to carry out electrical inspection work prescribed as class "L" in Part A of Schedule 3 if the person was issued with a licence to carry out electrical inspection work prescribed as class "L" in accordance with regulation 306 of the Electricity Safety (Installations) Regulation 1999 Note: No new class "L" Inspection Licences may be issued.

Regulations 29 and **30** establish further arrangements for mutual recognition.

Regulation 31 provides that ESV may refuse to issue a licence to an applicant if it is deemed that the applicant does not meet the criteria for the class of licence applied for; previous failure to comply with the Act or regulations relating to the installation and operation of electrical installations, has attempted to obtain a licence by fraud, misrepresentation or concealment of facts; conviction of fraud, dishonesty, drug trafficking or violence; negligence, incompetence or fraudulent conduct in connection with the carrying out of electrical installation.

Regulation 32 sets out the procedure and requirements for application for renewal of licences. The application must be in writing and contain details of any changes in the information provided in the application for the licence or for the most recent renewal of the licence or in any other circumstances. This regulation also prescribes the fees for renewal of an electrical worker's licence (13.9 fee units) and Restricted electrical worker's licence or an Electrical inspector's licence (20.8 fee units). ESV may refuse to renew a licence of an electrical worker based on any of the grounds in Regulation 31. This regulation phases out the previous class "F", class "R" and class "S" inspection licences.

Regulation 33 provides for ESV to be able to cancel the licence of an electrical worker who applies for a cancellation or who fails to apply for a licence renewal by the renewal date.

Division 2—General: Regulations 34 to 37

For the purposes of section 39 of the Act, **Regulation 34** provides that an apprentice is required to carry out all electrical installation work under the effective supervision of a licensed electrician, or in the case of electrical switchgear fitting work a licensed electrician or a licensed electrical switchgear worker.

Regulation 35 states that the holder of a licence must notify ESV of any change of name or address, within 10 business days after any change. Failure to do so may incur a penalty.

Regulation 36 sets out the conditions for the licensed worker regarding the licence cards issued by ESV, and the penalties for failure to sign the licence card; or to return the licence card within 10 business days after the worker is notified of licence cancellation. The contractor may receive a replacement licence card if lost or damaged on payment of a fee of 2.8 fee units.

Regulation 37 provides that the licence be produced when requested by an enforcement officer, or provide details of the licence to the officer, and sets out the penalty for failure to do so.

Part 4 — Fees: Regulations 38 and 39

Regulations 38 and **39** enable ESV to rebate the payment of an application fee if it is for a period of less than 5 years or refund part of the application fee if the licence is to be cancelled for the issue of a licence of another class.

Part 5 — Infringement Notices: Regulation 40

Regulation 40 references the sections of the Act under which infringement notices can be issued, and lists the regulations that are prescribed for that purpose.

Part 6 — Related Amendments

Regulation 41 makes consequential amendments to the *Electricity Safety (Installations) Regulations 2009*.

Part 7 — Transitionals

Regulation 42 defines 'commencement day' and 'old regulations' and establishes transitional arrangements for disconnect/reconnect worker's licences.

Schedules: 1 to 3

Schedule 1 revokes the Electricity Safety (Installations) Regulations 1999, Electricity Safety (Installations) (Amendment) Regulations 2001 and the Electricity Safety (Installations) (Amendment) Regulations 2004.

Schedule 2 prescribes the occupational areas for the purpose of the Restricted electrical licences (i.e., air conditioning and refrigeration, instrumentation, electronics, water heaters, electrical appliances, pre-assembled neon signs, composite equipment, control devices, gas appliances, motors, and hazardous area equipment).

Schedule 3 prescribes the classes of electrical inspection work and the required qualifications, proficiency and experience required for categories of electrical inspection work.

Attachment C

ASSUMPTIONS

1. The real discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

2. The cost of an applicant's time used to calculate 'administrative costs' is $104.71 per hour, which adopts the NECA recommended charge out rate for an electrical tradesperson EW8 construction/installation work. This is consistent with the methodology contained in the *Victorian Guide to Regulation* in relation to valuing staff time (Section C.2.1, p, C-5).

3. Other assumptions used for costing specific regulations is noted in the tables in Attachment E. Assumptions used for calculating fees is discussed in Attachment F.

4. For the purpose of calculating the administrative costs associated with processing registration and licences the following approach was taken:

    - Salary levels were determined for a VPS2 (mid-point) and VPS4 (top increment) officer. This provided figures of $41,527 per annum and $68,424 per annum respectively.
    - These salaries were grossed-up to allow for labour on-costs and overhead on-costs. The on-cost factors were obtained from the *Victorian Guide to Regulation* in relation to valuing staff time (Section C.2.1, p, C-5), and were: on-cost multiplier (1.165) and the overhead cost multiplier (1.5), providing a gross-up factor of 1.75 (i.e. 1.165 x 1.5 = 1.75).
    - Average hours worked per annum was based on the methodology contained in the *Victorian Guide to Regulation* (see p. C-5) in relation to valuing staff time, and estimated at 1,804 hours per annum (i.e. 44 weeks worked multiplied by 41 hours per week).
    - Annual gross-up salaries were divided by the number of estimated hours worked to obtain a notional hourly rate and this was divided by 60 to obtain a salary rate per minute.
    - The salary rate per minute was multiplied by the time taken to process relevant licences.

Attachment D

COMPARISON OF CURRENT REGULATIONS WITH PROPOSED REGULATIONS

Current Regulations	Proposed Regulations	Description	Change
Part 1 — Preliminary			
101	2	Authorising Provisions	No change in the sections of the Act which are referenced, however these have been divided and are listed on the regulations to which they apply.
102	1	Objectives	No changes, however the objectives have been divided and are listed on the regulations to which they apply. Additional regulations to allow for infringement notices and amend a previous Infringement Regulation.
103	NA	Commencement	No commencement date listed in the proposed Regulations.
104	3	Revocation	Regulations listed in Schedule 1 are revoked.
105	4	Definitions	Definitions included for 'applicant', 'Australian/New Zealand Wiring Rules', 'Australian regulatory authority', 'AS/NZS 3003', 'effective supervision', 'electrical contractor', 'electrical switchgear fitting work', 'fault finding', 'hazardous area', 'high voltage', 'licensed electrician', 'licensed electrical switchgear worker', 'low voltage', 'part 1 solution', 'switchgear and control gear assembly', 'nominated business supervisor', 'nominated technical supervisor', 'patient area', 'primary work function', 'regulatory authority' and defines the Act as meaning the *Electricity Safety Act 1998*.
106	6	Prescribed classes of electrical installation work	Expanded to include work on installations operating at any voltage in 'patient areas'. Patient areas is defined in the AS/NZS 3003 Standard as patient treatment areas of hospitals, medical and dental practices and dialyzing locations. The Standard definition is formally incorporated into the Regulations in Regulation 4.
107	5	Prescribed classes of electrical contracting	No change to wording of regulation, however proposed regulation references Regulation 6 instead of Regulation 106.
Part 2 — Registration of Electrical Contractors			
201	9 & 10	Qualifications for registration	Allows for electrical switchgear fitting work to be supervised by Electrical Switchgear Workers or Electricians. The Office is now referred to as ESV. Name change from Licensed Electrical Mechanics (LEM) Assessment to Licensed Electricians Assessment (LEA). Expanded to allow ESV to register people they assess have equivalent experience/proficiency to LEA.
	11	Mutual recognition	Mutual recognition of interstate/New Zealand registered or licensed electrical contractors by ESV is now encapsulated in a separate regulation.

Current Regulations	Proposed Regulations	Description	Change
	12	Refusal of Registration	Separate regulation included which was formerly contained within 201. Minor wording changes.
202	13	Prescribed Insurance	No change.
203	8	Applications	Minor wording changes.
204	14	Conditions of registration	Regulation 14 relates to electrical contractors . No change other than references to the proposed regulation numbers.
205	15	Obligations of registered contractors	Time frame allowed for contractors to notify ESV of changes is increased from 5 days to 10 days and penalty units introduced.
206	16	Cancellation of registration	No change other than The Office now referred to as ESV.
207	17	The register	The register must now be kept in electronic form rather than in writing, and is no longer required to contain insurance details or the date of any suspension of the registration. No other changes.
208	18	Registration Cards	Minor wording changes. Contractors with cancelled registrations now have 10 days rather than 5 to return the registration card to ESV.
Part 3 — Licensing of Electrical Workers			
301	7	Classes of electrical work	Expanded to include electrical work done in patient areas at any voltage. Now includes testing and fault finding in electrical equipment or component parts (see 7(b) and (c). Electrical inspection work is now specified in Schedule 3 rather than Schedule 4.
302	20	Electrician's licence	Minor wording changes. Certificate III in Electrotechnology Systems Electrician has been updated to Certificate III in Electrotechnology Electrician.
303	21	Supervised worker's licence	Minor wording changes. Certificate III in Electrical (Electrical Fitter) has been updated to Certificate III in Switchgear and controlgear.
NEW	22	Electrician (Supervised) worker's licence	This licence is only available to current holders of the Electrician (Supervised) worker's licence.
304	23	Occupier's Licence	This licence is only available to current Occupier's Licence holders; no new occupier's licences to be granted
NEW	24	Electrical Switchgear worker's licence	Separate regulation included specifying the requirements for Electrical Switchgear worker's Licence which is a new class of electrical worker.
305	25 26	Disconnect/reconnect worker's licence	Disconnect/reconnect worker's licence is replaced with **Restricted electrical worker's licence (Class 1) and Restricted electrical worker's licence (Class 2).** Class 1 allows disconnect/reconnect work, testing and fault finding. Class 2 allows disconnect/reconnect work and testing.

Current Regulations	Proposed Regulations	Description	Change
306	27	Electrical inspector's licence	The Office is now referred to as ESV. Proposed regulation refers to Schedule 3 rather than Schedule 4. L, F, R and S category licences have been abolished.
NEW	28	Class "L" Inspector's Licence	This licence is only available to current holders of the class "L" Inspector's licence; no new L licences will be granted.
307	19	Applications	No change other than referring to the relevant regulation numbers in the proposed Regulations.
NEW	30	Mutual recognition—interstate electricians	Electricians who hold an interstate equivalent licence, who are not ordinarily resident in Victoria, are taken to be licensed in Victoria provided that they notify ESV in accordance with the regulations.
308	31	Refusal of Licence	No change other than an additional requirement for the applicant to also have complied with enactments from other Australian states/territories and those of New Zealand.
309	32	Renewal of Licences	Minor wording changes. Class F, R and S Inspection Licences can not be renewed.
310	33	Cancellation of licence	Minor wording changes.
311	34	Apprentices	Expanded to allow for electrical switchgear fitting work.
312	35	Change of name or address	Time allowed for notification of changes to name or address increased from 5 business days to 10.
313	36	Written Licence	Written licence now referred to as Licence card. Time allowed for a cancelled licence to be returned to ESV increased from 5 business days to 10.
314	37	Licence to be produced on demand	No change other than an increase in the Penalty units from 1 penalty unit to 10.
Part 5.			
501	NA	Examinations for registration	Abolished
502	NA	Examinations for licensing	Abolished
Part 4 — Fees			
601	38, 39	Fees	Fees no longer contained in a Schedule, they now appear in the body of the Regulations and are expressed in fee units.
Part 7			
701	NA	Qualifications for registration	This Regulation no longer exists. This 1999 Regulation dealt with the contractors who were registered under the 1992 Regulations during the transition phase.
702	NA	Qualifications for electrician's licences	This Regulation no longer exists.

Current Regulations	Proposed Regulations	Description	Change
703	NA	Transitional exception for existing aerial lines	This Regulation ceased to have effect from 31/12/2003.
Schedules			
Schedule 1	Schedule 1	Revoked regulations	Schedule 1 in the 1999 Regulations revoked the previous Regulations and amendments. Schedule 1 in the proposed Licensing and Registration Regulations revoke the 1999 Regulations and 2000, 2001 and 2004 amendments.
Schedule 2		Fees	Fees no longer contained in a Schedule, They now appear in the body of the Regulations and are expressed in fee units.
Schedule 3	Schedule 2	Classes of Work Function	Renamed “Occupational Areas”. List of areas has been revised.
Schedule 4	Schedule 3	Inspection work classes	Categories F, R and S removed. Class L restricted from inspecting Part 1 Solutions.

Attachment E

Summary of Costs Imposed by the Electricity Safety (Registration & Licensing) Regulations 2010 (Discounted 10-Year Period - Rate 3.5%)			
Costs Imposed on the Electricians			
Regulation	**Description**	**Type of Cost**	
Regulation 8	Application for registration	Administrative	$307,845
Regulation 10	Qualifications for registration as an electrical contractor (General)	Compliance	$25,168,501
Regulation 13	Prescribed insurance	Financial cost	$49,440,830
Regulation 15	Obligations of registered contractors	Administrative	$108,854
Regulation 16 and 18	Cancellation of registration	Administrative	$5,976
Regulation 20	Electrician's licence	Administrative/compliance	$10,557,785
Regulation 21	Supervised worker's licence	Administrative/compliance	$1,721,537
Regulation 24	Electrical switchgear worker's licence	Administrative/compliance	$41,927
Regulation 25	Restricted electrical worker's licence (Class 1)	Administrative/compliance	$1,497,831
Regulation 26	Restricted electrical worker's licence (Class 2)	Administrative/compliance	$1,497,831
Regulation 27	Electrical inspector's licence	Administrative	$278,666
Regulation 32	Renewal of licences	Administrative	$1,564,754
Regulation 33, 35, 36	Cancellation of licence; change of details; delivery of cancelled card	Administrative	$174,892
		Total	**$92,367,228**
		Annual Cost	**$9,236,723**

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010					
Price		**Quantity**			**Administrative Cost**
Regulation 8 - Applications for registration					
Regulation	*Tariff*[1]	*Time (hours)*[2]	*Population*[3]	*Frequency*[4]	
Regulation 8 – Application form	104.71	0.50	681	1	35,654
Regulation 8(2)(f) – Copy of business name certificate	0.50		681	1	341
Regulation 8(2)(h) – Copy of registration under the Corporations Law	0.50		681	1	341
Regulation 8(2)(i) – Copy of qualifications under regulation 10	0.50		681	1	341
Regulation 8(2)(j) – Copy of insurance policy	0.50		681	1	341
				Total	**$37,016**

Discounted (10-Years)					
Year	**Administrative Cost ($)**				**Discounted Administrative Cost ($)**[5]
1	$37,016				$35,764
2	$37,016				$34,555
3	$37,016				$33,386
4	$37,016				$32,257
5	$37,016				$31,166
6	$37,016				$30,112
7	$37,016				$29,094
8	$37,016				$28,110
9	$37,016				$27,160
10	$37,016				$26,241
				Total	**$307,845**

Notes:
1. The value of an electrician's time of $104.71 is assumed. This adopts the NECA recommended charge out rate for an electronic tradesperson EW8 construction/installation work. A photocopy of relevant business certificates, qualifications and insurance is sufficient to satisfy this regulation.
2. ESV based on industry advice estimates that application forms take no longer than 30 minutes to complete.
3. From 1 July 2008 to 30 June 2009 there were 681 REC applications. ESV 2008-09 Annual Report.
4. Registration occurs annually.
5. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010					
Price		**Quantity**			**Administrative Cost[4]**
Regulation 10 - Qualifications for registration as an electrical contractor					
Description	*Tariff*[1]	*Time (hours)*[2]	*Population*[3]	*Frequency*[4]	
Regulation 10(3) – Establishing an electrical contracting business or equivalent	295.00		675	1	199,125
Time taken to complete a Electrical Contracting course	104.71	40.0	675	1	2,827,170
				Total	**$3,026,295**

Discounted (10-Years)					
Year	**Administrative Cost ($)**				**Discounted Administrative Cost ($)[5]**
1	$3,026,295				$2,923,957
2	$3,026,295				$2,825,079
3	$3,026,295				$2,729,545
4	$3,026,295				$2,637,241
5	$3,026,295				$2,548,059
6	$3,026,295				$2,461,893
7	$3,026,295				$2,378,641
8	$3,026,295				$2,298,203
9	$3,026,295				$2,220,486
10	$3,026,295				$2,145,397
				Total	**$25,168,501**

Notes:
1. Electrical contracting business course costs vary. NMIT charges $121 for this course, while the cost at RMIT is $470. Therefore, a tariff of $295 was selected. Licensed electrician assessments are costed as part of regulation 20. The value of an electrician's time of $104.71 is assumed. This adopts the NECA recommended charge out rate for an electronic tradesperson EW8 construction/installation work.
2. ESV advice based on time taken to complete training courses.
3. From ESV register. Approximately 650 licensed electricians and 25 electrical switchgear workers.
4. Registration occurs annually.
5. Numbers rounded.
6. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010					
Price		**Quantity**			**Administrative Cost[4]**
Regulation 13 - Prescribed insurance					
Description	*Tariff*[1]	*Time*	*Population*[2]	*Frequency*[3]	
Insurance against public liability or personal injury	620.00		9,200	1	5,704,000
Time taken to complete and return insurance premium	104.71	0.25	9,200	1	240,833
					$5,944,833

Discounted (10-Years)					
Year	**Administrative Cost ($)**				**Discounted Administrative Cost ($)[5]**
1	$5,944,833				$5,743,800
2	$5,944,833				$5,549,565
3	$5,944,833				$5,361,899
4	$5,944,833				$5,180,579
5	$5,944,833				$5,005,390
6	$5,944,833				$4,836,125
7	$5,944,833				$4,672,585
8	$5,944,833				$4,514,575
9	$5,944,833				$4,361,908
10	$5,944,833				$4,214,404
				Total	**$49,440,830**

Notes:
1. Public Liability Insurance policy for a self-employed REC with a turnover of $100,000 or less. The tariff ranges according to company turnover, number of employees and type of work undertaken.
A modal average of $620 was suggested by industry as being reasonable.
Insurance renewals are required each year. This entails completing a basic form noting company size, turnover, etc. Discussions with brokers suggested that this takes around 15 minutes.
2. As at 31 August 2008 there were 9,222 registered electrical contractors. This number has been relatively stable over recent years.
3. Insurance policies are renewed annually.
4. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010					
Price		**Quantity**			**Administrative Cost[4]**
Regulation 15 - Obligations of registered contractors					
Description	*Tariff*[1]	*Time*[2]	*Population*	*Frequency*[3]	
Regulation 15(1)(a)-(e) - Notification of change of details	104.71	0.08		1,000	8,726
Regulation 15(2) - Notification of change of technical supervisor functions	104.71	0.08		300	2,618
Regulation 15(3) - Notification of change of nominated business supervisor	104.71	0.08		200	1,745
				Total	**$13,089**

Discounted (10-Years)					
Year	**Administrative Cost ($)**				**Discounted Administrative Cost ($)[4]**
1	$13,089				$12,646
2	$13,089				$12,218
3	$13,089				$11,805
4	$13,089				$11,406
5	$13,089				$11,020
6	$13,089				$10,648
7	$13,089				$10,288
8	$13,089				$9,940
9	$13,089				$9,604
10	$13,089				$9,279
				Total	**$108,854**

Notes:
1. The value of an electrician's time of $104.71 is assumed. This adopts the NECA recommended charge out rate for an electronic tradesperson EW8 construction/installation work.
2. Notifications are be made by phone, online or in writing. On average it is estimated that such notification takes 5 minutes.
3. Estimated frequency of notifications was advised by ESV.
4. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010					
Price		**Quantity**			**Administrative Cost**
Regulation 16 and 18 - Cancellation of registration					
Description	*Tariff* [1]	*Time* [2]	*Population*	*Frequency* [3]	
Regulation 16(1) – Application in writing to cancel registration	104.71	0.33		20	698
Regulation 18(4) – Delivery of cancelled registration card	0.50			20	21
				Total	**$719**

Discounted (10-Years)					
Year	**Administrative Cost ($)**				**Discounted Administrative Cost ($)**[4]
1	$719				$694
2	$719				$671
3	$719				$648
4	$719				$626
5	$719				$605
6	$719				$585
7	$719				$565
8	$719				$546
9	$719				$527
10	$719				$509
				Total	**$5,976**

Notes:
1. The value of an electrician's time of $104.71 is assumed. This adopts the NECA recommended charge out rate for an electronic tradesperson EW8 construction/installation work.
2. Notification must be in writing and is assumed to take 20 minutes. ESV advise that registration cards are delivery by post.
3. ESV advised frequency of cancellations.
4. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010					
Price		**Quantity**			**Administrative Cost[4]**
Regulation 20 - Electrician's licence					
Description	*Tariff*[1]	*Time (hours)*[2]	*Population*[3]	*Frequency*[4]	
Regulation 19 - Completion of application	104.71	0.5	1,375	1	71,988
Regulation 20(a)(iii) – Licensed Electricians Assessment	295.00		1,375	1	405,625
Time taken to complete a Licensed Electricians Assessment course	104.71	5.5	1,375	1	791,869
				Total	**1,269,483**

Discounted (10-Years)					**Discounted Administrative Cost ($)[5]**
Year	**Administrative Cost ($)**				$1,226,553
1	$1,269,483				$1,185,075
2	$1,269,483				$1,145,000
3	$1,269,483				$1,106,281
4	$1,269,483				$1,068,870
5	$1,269,483				$1,032,725
6	$1,269,483				$997,802
7	$1,269,483				$964,060
8	$1,269,483				$931,459
9	$1,269,483				$899,960
10	$1,269,483			***Total***	**$10,557,785**

Notes:
1. The value of an electrician's time of $104.71 is assumed. This adopts the NECA recommended charge out rate for an electronic tradesperson EW8 construction/installation work. NMIT charges $121 for this course, while the cost at RMIT is $470. Therefore, a tariff of $295 was selected.
2. ESV advise that a application forms take no longer than 30 minutes to complete and the LEA assessment course takes 5.5 hours.
3. Number of licence applications per annum.
4. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010					
Price		**Quantity**			**Administrative Cost[4]**
Regulation 21 – Supervised worker's licence					
Description	*Tariff*[1]	*Time*[2]	*Population*[3]	*Frequency*[4]	
Regulation 19 - Completion of application	104.71	0.5	300	1	15,707
Regulation 21(a)(iii) – Safe Work Practice (SWP) course	690.00		300	1	207,000
Time taken to complete a Safe Work Practice (SWP) course	104.71	56.0	300	1	1,759,128
				Total	**$207,000**

Discounted (10-Years)					
Year	**Administrative Cost ($)**				**Discounted Administrative Cost ($)[5]**
1	$207,000				$200,000
2	$207,000				$193,237
3	$207,000				$186,702
4	$207,000				$180,389
5	$207,000				$174,288
6	$207,000				$168,395
7	$207,000				$162,700
8	$207,000				$157,198
9	$207,000				$151,882
10	$207,000				$146,746
				Total	**$1,721,537**

Notes:
1. The value of an electrician's time of $104.71 is assumed. This adopts the NECA recommended charge out rate for an electronic tradesperson EW8 construction/installation work.
The cost of a connection/re-connection course at various institutions is as follows: NMIT - $685, Box Hill TAFE - $690, and RMIT - $700. A representative cost of $690 was selected.
2. Based on industry advice, ESV advises that a application forms take no longer than 30 minutes to complete. ESV advises that completion accredited courses takes around 56 hours.
3. Estimated population derived from ESV register.
4. Approximately 300 applications from individuals, hence a frequency of 1 per applicant.
5. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010					
Price		**Quantity**			**Administrative Cost[4]**
Regulation 24 - Electrical switchgear worker's licence					
Description	*Tariff*[1]	*Time*	*Population*[2]	*Frequency*[3]	
Regulation 19 - Completion of application	104.71	0.5	5	1	262
Regulation 24(a)(iii) – Licensed Switchgear Worker's Assessment	380.00		5	1	1,900
Time taken to complete a Licensed Electrical Fitters Assessment course	104.71	5.5	5	1	2,880
				Total	**$5,041**

Discounted (10-Years)					
Year	**Administrative Cost ($)**				**Discounted Administrative Cost ($)[5]**
1	$5,041				$4,871
2	$5,041				$4,706
3	$5,041				$4,547
4	$5,041				$4,393
5	$5,041				$4,245
6	$5,041				$4,101
7	$5,041				$3,962
8	$5,041				$3,828
9	$5,041				$3,699
10	$5,041				$3,574
				Total	**$41,927**

Notes:
1. The value of an electrician's time of $104.71 is assumed. This adopts the NECA recommended charge out rate for an electronic tradesperson EW8 construction/installation work.
2. ESV advise that a application forms take no longer than 30 minutes to complete. ESV advises that completion accredited courses takes around 5.5 hours. Based on liaison with industry.
3. Estimated population derived from ESV register.
4. Approximately 5 applications from individuals, hence a frequency of 1 per applicant.
5. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010					
Price		**Quantity**			**Administrative Cost[4]**
Regulation 25 - Restrcited electrical worker's licence (Class 1)					
Description	*Tariff*[1]	*Time*[2]	*Population*[3]	*Frequency4*	
Regulation 19 - Completion of application	104.71	0.50	430	1	22,513
Regulation 25(3)(a)(iii) – Energy Safe Victoria practical examination	104.71	3.50	430	1	157,589
				Total	**$180,101**

Discounted (10-Years)					
Year	**Administrative Cost ($)**				**Discounted Administrative Cost ($)[5]**
1	$180,101				$174,011
2	$180,101				$168,126
3	$180,101				$162,441
4	$180,101				$156,948
5	$180,101				$151,640
6	$180,101				$146,512
7	$180,101				$141,558
8	$180,101				$136,771
9	$180,101				$132,146
10	$180,101				$127,677
				Total	**$1,497,831**

Notes:
1. The value of an electrician's time of $104.71 is assumed. This adopts the NECA recommended charge out rate for an electronic tradesperson EW8 construction/installation work.
2. ESV advise that a application forms take no longer than 30 minutes to complete and that a practical examimation takes around 3.5 hours.
3. Estimated population derived from ESV registery.
4. Approximatley 5 applications from individuals, hence a frequency of 1 per applicant.
5. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010					
Price		**Quantity**			**Administrative Cost[4]**
Regulation 26 - Restricted electrical worker's licence (Class 2)					
Description	*Tariff*[1]	*Time*[2]	*Population*[3]	*Frequency4*	
Regulation 19 - Completion of application	104.71	0.50	430	1	22,513
Regulation 26(3)(a)(iii) – Energy Safe Victoria practical examination	104.71	3.50	430	1	157,589
				Total	**$180,101**

Discounted (10-Years)					
Year	**Administrative Cost ($)**				**Discounted Administrative Cost ($)[5]**
1	$180,101				$174,011
2	$180,101				$168,126
3	$180,101				$162,441
4	$180,101				$156,948
5	$180,101				$151,640
6	$180,101				$146,512
7	$180,101				$141,558
8	$180,101				$136,771
9	$180,101				$132,146
10	$180,101				$127,677
				Total	**$1,497,831**

Notes:
1. The value of an electrician's time of $104.71 is assumed. This adopts the NECA recommended charge out rate for an electronic tradesperson EW8 construction/installation work.
2. ESV advise that a application forms take no longer than 30 minutes to complete and that a practical examination takes around 3.5 hours.
3. Estimated population derived from ESV register.
4. Approximately 5 applications from individuals, hence a frequency of 1 per applicant.
5. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010					
Price		**Quantity**			**Administrative Cost[4]**
Electrical inspector's licence					
Description	*Tariff*[1]	*Time*[2]	*Population*[3]	*Frequency4*	
Regulation 27 - Completion of application	104.71	1	320	1	104.71
				Total	**$33,507**

Discounted (10-Years)					
Year	**Administrative Cost ($)**				**Discounted Administrative Cost ($)[5]**
1	$33,507				$32,374
2	$33,507				$31,279
3	$33,507				$30,222
4	$33,507				$29,200
5	$33,507				$28,212
6	$33,507				$27,258
7	$33,507				$26,336
8	$33,507				$25,446
9	$33,507				$24,585
10	$33,507				$23,754
				Total	**$278,666**

Notes:
1. The value of an electrician's time of $104.71 is assumed. This adopts the NECA recommended charge out rate for an electronic tradesperson EW8 construction/installation work.
2. ESV advise that a application forms take around 1 hour to complete the application including addressing matters in Part A of Schedule 3
3. ESV 2008-09 Annual Report - total number of inspectors' licences in place was 318.
4. Annual applications, hence a frequency of one.
5. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010					
Price		**Quantity**			**Administrative Cost[4]**
Regulation 32 - Renewal of licences					
Description	*Tariff*[1]	*Time*[2]	*Population*[3]	*Frequency4*	
Regulation 32 - Completion of renewal application	104.71	0.25	35,937	0.2	188,148
				Total	**$188,148**

Discounted (10-Years)					
Year	**Administrative Cost ($)**				**Discounted Administrative Cost ($)[5]**
1	$188,148				$181,786
2	$188,148				$175,638
3	$188,148				$169,699
4	$188,148				$163,960
5	$188,148				$158,416
6	$188,148				$153,059
7	$188,148				$147,883
8	$188,148				$142,882
9	$188,148				$138,050
10	$188,148				$133,382
				Total	**$1,564,754**

Notes:
1. The value of an electrician's time of $104.71 is assumed. This adopts the NECA recommended charge out rate for an electronic tradesperson EW8 construction/installation work.
2. ESV advise that a application forms take no longer than 30 minutes to complete and that a practical examination takes around 3.5 hours.
3. There are currently 35, 937 licences in place.
4. Renewal occurs every 5 years.
5. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010					
Price		**Quantity**			**Administrative Cost[4]**
Regulation 33 - Cancellation of licence; Regulation 35 - Change of details; Regulation 36 - Delivery of cancelled card					
Description	*Tariff*[1]	*Time*[2]	*Population*	*Frequency3*	
Regulation 33 - Cancellation of licence	104.71	0.17		5	87
Regulation 35 - Change of name or address	104.71	0.17		1,200	20,942
Regulation 36(4) - Delivery of cancelled card	104.71	0.17		5	87
				Total	21,029

Discounted (10-Years)					
Year	**Administrative Cost ($)**				**Discounted Administrative Cost ($)[4]**
1	$21,029				$20,318
2	$21,029				$19,631
3	$21,029				$18,967
4	$21,029				$18,326
5	$21,029				$17,706
6	$21,029				$17,107
7	$21,029				$16,529
8	$21,029				$15,970
9	$21,029				$15,430
10	$21,029				$14,908
				Total	**$174,892**

Notes:
1. The value of an electrician's time of $104.71 is assumed. This adopts the NECA recommended charge out rate for an electronic tradesperson EW8 construction/installation work.
2. This requirements are very basic and ESV advise that the could be undertaken within 5 minutes.
3. ESV provided advice concerning the frequency of the events from its registry database.
4. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Costs Imposed by the Proposed Electricity Safety (Registration & Licensing) Regulations 2010		
Victorian Government Administrative Costs - Energy Safe Victoria		
Year	**Agency Administration Costs ($)[1]**	**Discounted Agency Administration Cost ($)[2]**
1	2,769,700	2,676,039
2	2,721,749	2,540,782
3	2,808,838	2,533,411
4	2,899,029	2,526,336
5	2,992,445	2,519,558
6	3,089,215	2,513,078
7	3,189,474	2,506,898
8	3,293,363	2,501,018
9	3,401,029	2,495,440
10	3,512,626	2,490,167
		25,302,727

Notes:

1. ESV administration costs calculated for determining fees: see Table F7 in Attachment F.
2. The discount rate used in this RIS is 3.5 per cent. In doing so, the RIS adopts the rate published in the *Victorian Guide to Regulation* (Section C.3, p. C-9)

Attachment F

PROPOSED FEES

Introduction

This Attachment sets out the approach to determining the proposed fees, consistent with the cost recovery guidelines, using a 'bottom up' approach. Fees are proposed for registration and licensing of electrical contractors and workers and the provision of duplication cards and extracts from the register. In accordance with the Victorian Government guidelines, the fees would be set on a full cost recovery basis over the life of the regulations (proposed for ten years). Full cost recovery was confirmed as the most appropriate approach for these fees in Section 7.

ESV's electrical licensing team assesses applications for new and renewal registrations and licences and administers the registration and licensing database. The component of the team's work that relates to licensed electrical work is included in the cost recovery basis for the proposed fees for registration and licensing.

ESV's electrical installation team investigates incidents relating to non-compliant electrical work and unlicensed electrical work, and administers the COES system. The component of the team's work that relates to unlicensed electrical work is included in the cost recovery basis for the proposed fees for registration and licensing.

The ratio between the ESV team's effort spent investigating non-compliant electrical work under the electrical installation regulations, and effort spent by the team in relation to unlicensed work under the licensing regulations, is 80:20. This ratio is based on the list of cases ESV investigates, and data was provided by the ESV legal section.

Service Centre staff - The service centre staff are part of the licensing and service centre team. They backfill the licensing staff as required and perform administration duties to assisting the licensing team, in addition to their normal service centre duties.

Electrical Staff - Cost recovery relating to the electrical staff is recovered under the licensing regulations and the electrical installation regulations. Cost recovery across these two regulations is to total 100 per cent across these two regulations. This function has been costed at 80 per cent in the electrical installation regulations and 20 per cent in the licensing regulations, representing the time spent on investigating unlicensed electrical work compared to non compliant electrical work.

Prosecutions Solicitor – The prosecutions solicitor spends 20 per cent of his time, on average on investigations relating in full or in part to unlicensed electrical work. The proposed fees were calculated using an 80:20 ratio.

The current fees are as follows:

- Registration of electrical contractor $240
- Renewal of registration of electrical contractor $170
- Renewal for licensed electrical worker $130

- Renewal for licensed electrical inspector $170
- Issue of duplicate registration card $50
- Copy of the register $150
- Extract from the register $25
- Application fee for examination $180
- Application fee for issue of licence for an electrical installation worker $200
- Application fee for renewal of licence for an electrical installation worker $130
- Application fee for issue of licence for an electrical inspector $240
- Application fee for renewal of licence for an electrical inspector $170
- Issue of duplicate licence $50
- Application fee for examination $180

Proposed fees calculation methodology

Overview of the ESV Licensing Function:

- ESV maintains the register under the *Electricity Safety Act*
- As at 6 July 2009 this included 37, 521 licences (LEWs) and 9,500 RECs
- LEW hold their licences for five years
- LEIs renew each year
- REC's currently renew each year; under the proposed regulations the RECs will renew every 5th year. In the first year REC's will be allocated a year from 1-5 to renew in and then every fifth year thereafter
- The licensing function includes the process for assessing new applications and the renewal of existing licences and registrations
- The function also includes the prosecution of those people working unlicensed and/or unregistered.
- The electrical investigation function which focuses on non compliant electrical work is funded through the COES for non compliant electrical work and also through the licensing function for unlicensed electrical work. The split is 80:20 based on the ratio of investigations between non compliant electrical work and unlicensed electrical work

The number of licences assessed and issued is as follows

- LEIs: Records show that up to 3 per cent of LEIs will let their licence lapse when it is due for renewal every year. It is expected that over the life of these regulations that the number of LEI licences will remain steady with 2 per cent of LEIs due for renewal lapsing each year, and being replaced with newly issued licences.
- LEWs: 30 June figures have been the following over the past 6 years:

2009 – 37,189

2008 – 36,543

2007 – 35,937

2006 – 35,228

2005 – 34,875

2004 – 34,128

Records show that up to 20% of LEW's will let their licence lapse when it is due for renewal every 5 years, and that over this time new licenses issued each year have increased by 9% over 5 years. It is expected that over the life of these regulations that the number of LEW licences will increase slightly with 20% of LEW's due for renewal lapsing each year, and being replaced with newly issued licences, and a slight increase in additional new applications each year of approximately 600. As such it is expected that the number of LEW licences in ten years will be 42,592.

- RECs: 30 June figures have been the following over the past 6 years

2009 – 9,502

2008 – 9,134

2007 – 9,021

2006 – 8,848

2005 – 8,712

2004 – 8,330

Records show that up to 6% of REC's will let their registration lapse when it is due for renewal every year, and that over this time new registrations issued each year have increased by 14% over 5 years. It is expected that over the life of these regulations that the number of REC registrations will increase slightly with 6% of REC's due for renewal lapsing each year, and being replaced with newly issued registrations plus approximately a further 130 per year. Where REC's go to 5 years, it is expected that the renewal rate will be 70% (5 times 6%). As such it is expected that the number of REC registrations in ten years will be 10,962.

Using the above analysis, it is estimated the following quantity of transactions will occur in each year.

Table F1: Base Level Forecast Transactions over ten year period

Year	Base	1	2	3	4	5	6	7	8	9
Transactions	18,197	10,944	10,837	10,730	10,622	10,996	11,411	11,336	11,261	11,186

Source: ESV licensing database

The higher level in the base year is because over the first 12 months all RECs which are currently on an annual renewal program will be converted to a 5 year renewal program, resulting in only one fifth of RECs being renewed each year.

Each assessment involves multiple steps (see below):

- The assessment time for each will vary due to a variety of reasons, but usually involving some type of further follow up required, possible documentation and/or verification of records
- The assessment time will also vary based on the assessment criteria for each category as outlined in the *Electricity Safety Act*
- LEW's are generally the least time consuming, however Restricted electrical worker's licences (formerly Disconnect/Reconnect worker's licence) ("type (D licences") are more complex and as such we have included D licences as a separate category in the proposed fee structure.

The level of transactions varies from the base year to year 1 based on the re-allocation of REC's over a five-year period.

Based on these variances, and using the time taken for a renewal of a LEW (general) as one unit, the following assessment allocations are applicable.

Table F2: Time taken to administer registration and licensing requirements

Type	Renewal	Issued	Item
REC	1.50	3.125	
LEW – D	1.50	3.125	
LEW - General	1.00	2.000	
LEI	1.50	3.125	
Duplicate Cards			0.200
Extracts			0.200

Note: LEW–D refers to disconnect/reconnect licence types

Based on these allocations, the following 'units' of transactions are processed each year.

Table F3: Number of unit transactions forecast over ten year period

Year	Base	1	2	3	4	5	6	7	8	9
Transactions	24,708	16,439	16,278	16,117	15,957	16,324	16,947	16,834	16,722	16,609

Source: Based on total actual transactions in table H1 allocated into 'unit transactions' as outlined in table H2.

Time Allocation Available: The units of time available to assess and process these transactions are based on the following assumptions:

- All licensing staff except the Licensing Manager is involved in day to day processing 100% of the time
- The licensing Manager oversees complex assessment issues, originally assessed by other licensing staff
- 20% of the time in the service centre is available to assist the licensing team in their assessments.
- The time spent investigating unlicensed electricians is included in the cost of assessing licences

- The base situation is based on the number of licensing staff being comparative to the number of transactions assessed and processed annually once all REC's are transferred to 5 year licences.
- As such the working days available are 1,344 per year in the base year and 840 working days once RECs are transferred to 5 year regulations.

Time Spent Assessing and Processing Applications:

Table F4: Time Spent Assessing and Processing Applications

Total days spent on Licensing	Licensing	Service Centre
Total	210	42

Note: Excludes Licensing Manager.

Process and Assessing Steps:

The Steps in assessing a renewal and/or a new application are:

- A renewal form is sent 60 days prior to expiry, in which the renewal is confirmed and completed and returned to ESV with payment
- A renewal can also be done online now, prior to the expiry date in which the person again confirms the information and processes their credit card payment for payment via our website
- A renewal where the situation has/is changing, does require further work by the registrar and ESV
    - Addition of Business Name
    - Removal of Business Name
    - Changing from Sole Proprietor to Partnership to Company
    - Changing from Partnership to Company or Sole Proprietor
    - Adding/removing Technical Nominees
    - Adding/removing Business Nominees
    - Notification of Workers List
    - Changing the registration holder
- Any of the above changes requires paperwork and the appropriate documentation to be completed in order to be changed.
- Once the renewal is received it is then determined if it is a "straight forward" renewal.

1. *Renewal Straight Forward – by Mail*

ESV Officer reviews form
Processes Renewal
Confirms Information
Files/Scans Document & Attaches to Database
Prints Card & Letter
Mail Out

2. *Renewal Straight Forward – Online* Confirms Information Files/Scans Document & Attaches to Database Prints Card & Letter Mail Out

3. *New Application – by Mail/Counter* Application Answers are reviewed Documentation is checked and confirmed for authenticity OTTE Database is confirmed Documentation is check listed and ready for loading Database entry Process Payment Print Receipt Confirm Licence Numbers & Information to Application File Set up relevant files Prints Card & Letter Mail Out

Note: If an application is not straight forward, this process can be 7 – 10 working days, including follow up and consultation with applicant, training bodies etc.

Cost Recovery

The proposed fees must be structured on a cost recovery basis. For the purposes of these fees we have used the bottom up approach wherever possible. This approach is described below for all major costs. Indirect and overhead costs are also allocated on a basis consistent with the cost recovery basis.

The following lists the major expenditure items where the bottom up approach has been applied and then outlines the approach to the allocation of indirect costs and overheads.

Salaries and Oncosts:

The salaries are split into three areas. These are:

1. 100% of direct salaries relating to assessing licensing applications;

2. 20% of the salaries relating to the service centre staff, that spend 20% of their time working with the licensing function

3. 20% of the salaries relating to the electrical installation team, representing the time spent on investigating unlicensed electrical work compared to non compliant electrical work (see electrical installation regulations).

Of the $720,000 of salaries, approximately $420,000 relates to the direct licensing and service centre function and approximately $300,000 relates to investigating non-compliant electrical work.

There are:

- Indirect costs related to licensing's share of other costs such as IT, insurance etc which cannot be as a whole allocated to a specific section.

- Overhead costs are the licensing section's share of those costs not directly related to an output area such as licensing, but which are required in the ordinary course of running the business. E.g costs related to licensing's share of corporate staffing.

The following direct costs apply to the licensing function:

- 100% of licensing staff salaries
- 20% of service centre staff (as their roles are 80% service centre and 20% licensing)
- 20% of the prosecutions solicitor based on time spent on unlicensed prosecutions
- 20% of electrical staff representing the time spent on investigating unlicensed electrical work compared to non compliant electrical work

It is assumed for the period of the next ten years that:

- The current salary bandings will remain the average bandings over the next ten years
- All staff will accrue leave consistent with the ESV Industrial Agreement
- Superannuation will be paid as per the ESV Industrial Agreement
- Oncosts relating to payroll tax and work cover amounts will remain at current levels

Once the REC's move onto 5 year renewals, salaries will be adjusted consistent with the time taken to process the quantity of estimated transactions for that period.

Advertising:

ESV has three main advertising campaigns each year. These focus on

- Always using a licensed electrician
- Gas Safety
- Electrical Appliance Safety

The direct cost of radio and television adverting campaigns for always using a licensed electrician are allocated directly to the licensing function.

In addition, each year 4 issues of the Energy Safe Magazine are printed and distributed to each licence or registration holder on the register. This cost is offset at times from sponsorship derived from the magazine. The net cost is allocated directly to the licensing function.

Motor Vehicles:

There is no direct cost for motor vehicles for staff involved directly with assessing and processing licences, but there is for those who are investigating unlicensed work in the field.

The motor vehicles costs are determined by working out the total fleet cost for motor vehicles and dividing them by the number of cars in the fleet. This is then multiplied by the pro-rata amount for those staff that have been allocated a motor vehicle in the electricity investigations area.

This is calculated as follows:

- Total motor vehicle fleet costs for ESV
- The number of fleet vehicles, 49
- The average cost per vehicle
- The number of vehicles allocated to electrical investigators is 10
- The electrical investigators spend 20% of their time investigating incidents relating to unlicensed electrical work

Printing and Stationery:
There are several costs which relate directly to the licensing function. The cost of a licensing card is currently 35 cents per card and renewals are sent out by post.

IT Application:
The Licensing register has a useful life of approximately 7 to 10 years. It was last updated in 2007 and it is expected to be updated again before the expiration of the proposed regulations

Other Costs:
Consistent with the cost recovery guidelines, overhead costs are also to be allocated to the functions as described below to these regulations to determine a full cost recovery basis.

The approach to date has been consistent with the 'bottom' up approach as outlined in the guidelines. Overhead costs are allocated on a basis consistent with the guidelines and calculated as follows

Assumptions in bottom-up cost calculation approach

- Salaries are based on actual current bandings for staff with leave and oncost as per the ESV Industrial agreement
- It is assumed that this reporting structure will be in place for the life of the regulations and they will average the same bandings over that period
- Advertising is based on actual radio and television campaigns conducted in 09/10 for the 'always use a licensed electrician campaign. It is assumed that these campaigns will occur each year over the life of the regulations

- Motor vehicle expenses relate to the prorated costs of electrical inspectors in the field who investigate incidents relating to unlicensed electrical work.
- Approximately $10k per year is direct expenditure to purchase cards.
- The allocation of corporate overheads is done on the following basis
    - In the 1st instance direct costs are allocated directly to the licensing function
    - Secondly, the consumption of other costs by the licensing function is then allocated on a pro rata basis (at this stage corporate is still treated as a separate area)
    - Thirdly, all income and costs allocated to corporate and then allocated on a pro rata basis to each of the output areas, licensing being one of these output areas.
- The deemed functional areas are
    - Functional Area - Corporate
        - Director
        - Corporate Services
        - Legal
    - Output Functional Areas
        - Licensing
        - Equipment Approvals
        - Equipment Efficiency
        - COES
        - Electrical Installations
        - Gas Type A Installations
        - Gas Type B Installations
        - Gas Complex Installations
        - Electrolysis
        - Pipelines
        - Infrastructure Gas Safety
        - Infrastructure Electricity Safety
        - Infrastructure Electricity Risk and Audit
- Depending on the budget line, the cost driver on which the prorated amount is determined may vary. Each budget line is allocated a cost driver. The cost drivers are
    - EFT Staff – all Staff
    - EFT Staff – excluding corporate services (for redistributing corporate costs)

- Motor Vehicles – based on motor vehicles allocation
- Motor Vehicle Parking – based on MV parking allocation
- IT – based on EFT staff slightly adjusted for high IT consumers
- Legal – based on prosecutions listing
- Advertising – based on campaigns in output functional areas
- Accommodation – based on EFT staff slightly adjusted for city, suburban and country locations

The budget lines have been applied on the following pro rata basis:

Table F5: Basis for allocation of overheads

Salaries	Total salaries across ESV prorated on an **EFT basis**
Salaries - Oncosts	Total oncosts across ESV prorated on an **EFT basis**
Advertising	Total advertising across ESV prorated to the three areas which ESV's campaigns are directed to
Computer Expenses	Total IT across ESV prorated on an **EFT basis slightly adjusted for high IT consumers**
Motor Vehicles	Total Motor vehicles across ESV prorated on a MV allocation basis
Printing & Stationary	Total salaries across ESV prorated on an **EFT basis**
Communications	Total salaries across ESV prorated on an **EFT basis**
Publications & Subscriptions	Total salaries across ESV prorated on an **EFT basis**
Travel	Total salaries across ESV prorated on an **EFT basis**
Conferences & Training	Total salaries across ESV prorated on an **EFT basis**
Depreciation	Total salaries across ESV prorated on an **EFT basis**
Legal Fees	Total salaries across ESV prorated on an **EFT basis**
Technical Fees	Total salaries across ESV prorated on an **EFT basis**
Rent	Total salaries across ESV prorated on an **EFT basis, adjusted slightly based on city, suburban or country location for staff**
Indirect	Total salaries across ESV prorated on an **EFT basis**
Corporate Overhead	Total salaries across ESV prorated on an **EFT basis**

Changes to the cost structure over the ten years:

- It is assumed the level of transactions over the ten years of the regulations will be as described above.
- It is assumed the allocations will remain as per the current position of the life of the regulation
- Over the life of the regulations the cost structure may increase and assumptions have been made about these cost structures.

Summary of Costs

Based on the above assumptions, the total cost to be recovered for the licensing function in the base year is $2,769,701 and in year one it is $2,721,749 (this is lower due to the change to five-year renewals for REC's between the base year and year one).

Based on assumptions of costs over the ten year period of the regulations, it is anticipated that the costs to be recovered in the tenth year of the regulations will be $3,512,626

Table F6: Summary of Costs

Line	Description	Amount ($)
1.a	Salaries	720,054
1.b	Motor Vehicles	48,959
1.c	Campaigns	635,500
1.d	Other	164,275
A	**Total direct licensing costs**	1,568,788
2.a	Indirect costs	452,142
2.b	Overhead allocation of costs in operating licensing system	700,819
B	**Total indirect and overhead costs**	1,152,961
C	**Total operating costs of licensing system**	2,721,749
3	Total licences	10,944
4	Total licences converted to work-based units	16,439
D	Cost per work-based unit	166

Over the life of the regulations (a 10 year period) the following costs are required to be recovered.

Table F7: Cost to be recovered, 10 year period

Year	Costs ($)
Base year	2,769,700
Year 1	2,721,749
Year 2	2,808,838
Year 3	2,899,029
Year 4	2,992,445
Year 5	3,089,215
Year 6	3,189,474
Year 7	3,293,363
Year 8	3,401,029
Year 9	3,512,626

Table F8: Work-Based Units

Type	Renewal	Issued	Item
REC	1.50	3.125	
LEW – D	1.50	3.125	
LEW - General	1.00	2.000	
LEI	1.50	3.125	
Duplicate Cards			0.200
Extracts			0.200

Table F9: Proposed Fees in Year One

	Fee			Rounded		
Type	**Renewal**	**Issued**	**Item**	**Renewal**	**Issued**	**Item**
REC	249	519		250	520	
LEW – D	249	519		250	520	
LEW - General	166	332		165	330	
LEI	249	519		250	520	
Duplicate Cards			33			33
Extracts			33			33

Proposed Fees in the Base year are as follows (an average fee change each year of 2.5 per cent is assumed).

Table F10: Proposed Fees in the Base year are as follows (assumes an average fee change each year of 2.5%)

	Fee		
Type	**Renewal**	**Issued**	**Item**
REC	243	506	
LEW – D	243	506	
LEW - General	162	324	
LEI	243	506	
Duplicate Cards			32
Extracts			32

Fee Units

These regulations are scheduled for ten years and are provided on a cost recovery basis. Accordingly, they must provide for cost recovery in every year of the regulations, including year ten. The *Monetary Units Act* allows for fees to be indexed each year over the ten years. Indexation assists licence/registration holders by 'smoothing' fee changes each year rather than requiring a large, one-off change every ten years.

Assuming the fee index increases by approximately 3 per cent each year, cost recovery would be achieved in the final nine years of the regulations. However, this would not be the case in the base year, where over-recovery would occur due to all REC's having to be converted to five-year renewals.

The proposed Regulations contain the following provision for fees.

Table F11: Proposed fee units

Regulation	Summary	Description
8(5)	REC	The prescribed fee— (a) for an application for registration as an electrical contractor is 43.3 fee units; (b) for an application for renewal of registration as an

		electrical contractor is 20.8 fee units.
17(4)	Extract	The prescribed fee for an extract from the register is 2.8 fee units.
18(6)	Duplicate Card	The prescribed fee to issue a duplicate registration card is 2.8 fee units.
19(5)	LEW	The prescribed fee for a licence application is 27.8 fee units.
19(6)	LEW (Restricted and LEI)	The prescribed fee for an application for a Restricted electrical worker's licence or Electrical inspector's license is 43.3 fee units.
32(5)	LEW	The prescribed fee for an application for the renewal of a licence (other than a Restricted electrical worker's licence or Electrical inspector's licence) is 13.9 fee units.
32(6)	LEW (Restricted and LEI)	The prescribed fee for an application for the renewal of a Restricted electrical worker's licence or Electrical inspector's license is 20.8 fee units.
36(6)	Duplicate Licence	The prescribed fee for the issue of a duplicate licence is 2.8 fee units.

Attachment G

STATEMENT OF NO MATERIAL IMPACT

Administrative Burden Statement

In accordance with the *Victorian Guide to Regulation – Measurement of Changes in Administrative Burden* issued by the Treasurer in April 2007, it has been determined that the regulatory costs imposed by the Electricity Safety (Registration and Licensing) Regulations 2010 (the Proposed Regulations) will not lead to a material change in the administrative burden on business or not-for-profit organisations in Victoria.

The proposed Regulations do not impose any new information, reporting or recording keeping obligations on business, and consequently they will not lead to a material change in the administrative burden on business or not-for-profit organisations in Victoria

Attachment H

COMPETITION TEST

The 'competition test' is used to assess the proposed Regulations against any possible restrictions on competition. The test asks whether the proposed Regulations:

- allows only one participant to supply a product or service;
- requires producers to sell to a single participant;
- limits the number of producers of goods and services to less than four;
- limits the output of an industry or individual producers;
- discourages entry by new persons into an occupation or prompts exit by existing providers;
- imposes restrictions on firms entering or exiting a market;
- introduces controls that reduce the number of participants in a market;
- affects the ability of businesses to innovate, adopt new technology, or respond to the changing demands of consumers;
- imposes higher costs on a particular class or type of products or services;
- locks consumers into particular service providers, or makes it more difficult for them to move between service providers; and/or
- imposes restrictions that reduce range or price or service quality options that are available in the marketplace.

Attachment I

MULTI-CRITERIA ANALYSIS

Multi-criteria Analysis (MCA) is described in part 5-18 of the Victorian Guide to Regulation incorporating: Guidelines made under the *Subordinate Legislation Act 1994.* MCA is useful where it is not possible to quantify and assign monetary values to the impacts of a proposed measure (eg. measures that have significant qualitative, indirect or social impacts).

MCA requires judgements about how proposals will contribute to a series of criteria that reflect the benefits and costs associated with the proposals. A qualitative score is assigned, depending on the impact of the proposal on each of the criteria weightings that may be assigned to each criterion, reflecting its relative importance in the policy decision. An overall score is derived by multiplying the score assigned to each measure by its weighting and then summing the result. If a number of options are being compared, then the option with the highest score represents the preferred approach.

Attachment J

LICENSING ARRANGEMENTS IN OTHER STATES

In all states, a licence is required before any electrical wiring work can be undertaken. Electrical wiring work means the actual physical work of installing, repairing, altering, removing or adding to an electrical installation or the supervising of that work.

State	Instrument	Electrical Contractors	Electrical Workers	Other licence types	Other notes
NSW	*Home Building Act 1989*		An electrician's licence (of up to 3 years) requires* completion of an electrical trade apprenticeship that includes the completion of the Certificate III in Electrotechnology Electrician (UEE30806 or UEE30807 or UTE31199)* and all of the following: 1. a certificate of Proficiency as an Electrician or an Electrical Mechanic from the Vocational Training Tribunal (VTT) 2. at least 12 months relevant electrical wiring installation work experience in residential, commercial and/or industrial situations requiring knowledge and understanding of the AS/NZS 3000:2007. Practical experience may be gained either during or after completion of an apprenticeship.	Supervised worker licences and restricted worker licences (disconnection reconnection) are also granted.	Fine of $2,200 for individuals and $22,000 for companies doing unlicensed work
WA	Electricity (Licensing) Regulations 1991	Licence required for electrical contracting.	An electrician's licence is granted for up to 5 years. EnergySafety and the Electrical Licensing Board have established Essential Performance Capabilities Required for Licensed Electricians, a set of 66 competencies as safety	Training and restricted worker licences are also available	

State	Instrument	Electrical Contractors	Electrical Workers	Other licence types	Other notes
			outcomes for licensing purposes. These are a nationally consistent set as agreed by the National Uniform Electrical Licensing Council. A licence requires completion of a recognised qualification that satisfies this *List of Essential Performance Capability Requirements for Licensed Electricians.*		
ACT	*Construction Occupations (Licensing) Act 2004* Construction Occupations (Licensing) Regulations 2004	Partnerships and corporations can obtain a licence if a director, employee or partner is a licensed electrician. Individuals are licensed as a electrical contractor if they hold an unrestricted electrician's licence. When applying for a company licence a recent 'Historical Company Extract' from the Australian Securities and Investment Commission (ASIC) must be provided. If an unrestricted electrician does not hold an electrical contractor's licence but is advertising electrical wiring services they must not use the term 'electrical contractor'. However, they may advertise as a licensed electrician.	An unrestricted electrician's licence (3 years) requires both theoretical knowledge and practical experience of electrical wiring work. The standard current qualification is Certificate III in Electrotechnology Systems Electrician. (NB: The Regulations provide that the registrar may, in writing, declare the qualifications necessary for an individual to be eligible to be licensed in a construction occupation or occupation class. The registrar may require the applicant to undertake an assessment to find out whether the applicant has a skill reasonably necessary to satisfactorily exercise the functions of a construction occupation or class of construction occupation under the licence applied for.)	Restricted worker licences are also available. Supervised workers may apply for a permit.	No level of insurance is prescribed. Before providing an electrical wiring service to clients licensees must give their clients evidence of what insurance they hold in relation to the service they are providing. The licensee may ask the client to sign an acknowledgement that the client has been told about their insurance. The acknowledgement must state the time and date it was given. The licensee must immediately give the client a copy of the acknowledgement.
SA	*Plumbers, Gas Fitters and Electricians Act 1995*	To contract for any electrical work, which includes the installation of fixed electrical wiring, evidence of completion of	Systems electrician licence granted following completion of apprenticeship, requiring Certificate III - Electrotechnology Systems	Supervised (apprentice) and restricted work licences also available	

State	Instrument	Electrical Contractors	Electrical Workers	Other licence types	Other notes
		one of the following modules must also be provided: 1. Single Phase Electrical Installation Testing Course (Training provider: PEER TEC); or 2. NUE408 Electrical Installation Testing & Verification (Training provider: TAFE; or 3. NE171 Electrical Installation Safety Testing - Electrical Stream Module (Training provider: TAFE); or 4. TAFE SA's 18 week course and assessment on AS/NZS3000:2007 Wiring Rules.	Electrician. Applications also require a Statement of Attainment showing satisfactory completion of electrical module NUE 505A -Electrical Systems Safety Individuals, or at least one individual in a partnership or partners combined, or at least one director, or directors combined, must currently hold a contractor licence under the Building Work Contractors Act 1995; Plumbers, Gas Fitters and Electricians Act 1995 or Security and Investigation Agents Act 1995, which authorises you to carry on business as a sole trader, or as a sole director, or otherwise satisfy listed recognised courses that meet the business knowledge and experience requirement.		
Qld	Electrical Safety Regulation 2002	A contractor's licence requires 1 qualified business person and 1 qualified technical person. Applicants must meet financial (net realisable assets) and insurance requirements ($5m).	An electrician's licence (5 years) granted upon satisfactorily completing an apprenticeship under the Vocational Education, Training and Employment Act 2000 to achieve competence in the trade work of an electrical mechanic; and satisfactorily completing a course of instruction decided by the chief executive; and proof of competence in cardio pulmonary resuscitation (CPR) eg. current statement or certificate of	Training and other classes of licences available.	Contractor licences require public liability insurance of at least $5million.

State	Instrument	Electrical Contractors	Electrical Workers	Other licence types	Other notes
			attainment.		
Tas	*Occupational Licensing Act 2005*		An electrical practitioner's licence may be issued to a person who has completed either of the following qualifications: (i) Certificate III Electrotechnology Systems Electrician (UTE31199); (ii) Certificate III Electrotechnology Electrician (UEE30807); or an equivalent qualification approved by the Administrator; and completed 12 months experience in the practical application of AS/NZS 3000:2007 (Wiring Rules); and satisfied the Administrator that he or she has completed the equivalent of 4 years relevant experience performing electrical work in residential, commercial or industrial situations.	Restricted and provisional licences also granted. A (full) licence may also be issued to provisional electrician who has completed 12 months experience in the practical application of AS/NZS 3000:2007; satisfied the Capstone Assessment requirements within the Certificate III courses; and completed any gap training required by a certificate issued as an Off-shore Technical Skills Record.	Occupational Licensing General Insurance Notice 2008 provides that A licence holder must have insurance that indemnifies him or her in respect of domestic prescribed work for public liability for an amount of at least $5,000,000 for any one occurrence and $5,000,000 for all claims for completed work liability.

** Note the NSW also provides other 'pathways' for obtaining a licence, recognising completion of superseded courses, and holders of licences and certificates prior to the commencement of the new arrangements (3 July 2009).*

In all states, persons who hold an electrician's licence in another part of Australia or in New Zealand, are generally entitled to an electrician's licence that allows them to carry out the equivalent work. They must complete a form and provide the current licence from which they seek mutual recognition, and pay any required fee. Mutual recognition does not apply to companies or partnerships. *Licence Recognition* is a website to make it easier for licensed tradespeople and authorities that issue licences to know what licence a worker is entitled to when applying for a licence in another jurisdiction. A user can look up a licence entitlement in another state or territory, based on the currently-held licence. The website also has information on who to contact to apply for a licence.

Electricity Safety (Registration & Licensing) Regulations

PART 1—PRELIMINARY

1 Objectives

The objectives of these Regulations are to—

(a) provide for the registration of electrical contractors;

(b) provide for the licensing of electrical workers;

(c) prescribe fees, penalties and other matters authorised by the **Electricity Safety Act 1998**;

(d) to prescribe certain provisions of these Regulations that create offences as provisions in respect of which infringement notices may be served; and

(e) to make a related consequential amendment to the Electricity Safety (Infringements) Regulations 2000 and the Electricity Safety (Installations) Regulations 2009.

2 Authorising provisions

These Regulations are made under sections 152, 156 and 157 of the **Electricity Safety Act 1998**.

3 Revocation

The regulations listed in Schedule 1 are **revoked**.

4 Definitions

In these Regulations—

applicant—

(a) in Part 2 means a person referred to in regulation 8(1);

(b) in Part 3 means a person referred to in regulation 19(1);

Australian/New Zealand Wiring Rules means the Australian/New Zealand Standard, 'Electrical Installations (known as the Australian/New Zealand Wiring Rules)', AS/NZS 3000 as published or amended from time to time;

Australian regulatory authority means—

(a) Energy Safe Victoria; or

(b) a person or body that, under the law of another State or a Territory administers the licensing of electrical workers in that State or Territory;

AS/NZS 3003 means the Australian/New Zealand Standard, 'Electrical installations - Patient treatment areas of hospitals and medical, dental practices and dialyzing locations', AS/NZS 3003 as published or amended from time to time;

effective supervision, in relation to electrical work, means—

(a) being present at the site of the electrical work to the extent necessary to ensure

that the work is being correctly performed and carried out in accordance with the Act and any of the regulations relating to the installation and operation of electrical installations; and

(b) being aware of the details of the electrical work being performed and giving detailed instructions and directions with respect to the electrical work;

electrical contractor means a person granted a registration as an electrical contractor on the basis that Energy Safe Victoria is satisfied that the person meets the requirements set out in regulation 9;

electrical switchgear fitting work means the assembly, alteration, repair and maintenance of switchgear and controlgear assemblies;

fault finding means the testing of the operation of electrical equipment to determine if that electrical equipment is safe and working correctly;

hazardous area has the same meaning as it has in the Australian/New Zealand Wiring Rules;

high voltage means a voltage exceeding low voltage;

licensed electrician means an electrical installation worker holding an electrician's licence under regulation 20;

licensed electrical switchgear worker means an electrical installation worker holding an electrical switchgear worker's licence under regulation 24;

low voltage has the same meaning as it has in the Australian/New Zealand Wiring Rules;

part 1 solution has the same meaning as it has in the Electricity Safety (Installations) Regulations 2009;

switchgear and controlgear assembly means a combination of one or more switching devices together with associated control, measuring, signalling, protective and regulating equipment, completely assembled under the responsibility of a manufacturer, with all the internal electrical and mechanical inter-connections and structural parts;

nominated business supervisor means a person nominated under regulation 9(2);

nominated technical supervisor means a person nominated under regulation 9(1);

patient area has the same meaning as it has in AS/NZS 3003;

primary work function means a work function that is primarily related to one of the occupational areas set out in Schedule 2;

regulatory authority means—

(a) an Australian regulatory authority; or

(b) a person or body in New Zealand that administers the licensing of electrical workers for New Zealand;

the Act means the **Electricity Safety Act 1998.**

5 Prescribed classes of electrical contracting

For the purposes of Division 1 of Part 3 of the Act, any contracting or undertaking to carry out electrical installation work of a class prescribed by regulation 6 is a prescribed class of electrical contracting.

6 Prescribed classes of electrical installation work

For the purposes of Division 1 of Part 3 of the Act, a prescribed class of electrical work is the installation, alteration, repair or maintenance of an electrical installation ordinarily operated—

(a) at low voltage or a voltage exceeding low voltage in any area; or

(b) at any voltage in a patient area.

7 Classes of electrical work

For the purposes of Division 2 of Part 3 of the Act the following classes of electrical work are prescribed—

(a) electrical installation work carried out on an electrical installation ordinarily operated—

(i) at low voltage or a voltage exceeding low voltage in any area; or

(ii) at any voltage in a patient area.

(b) electrical installation work required to carry out a primary work function relating to low voltage fixed electrical equipment that involves—

(i) the disconnection of that electrical equipment or a component of that electrical equipment; and

(ii) the reconnection of that electrical equipment or component or the connection of other equipment or any component of equivalent power and current in the same location and without alteration to existing cables; and

(iii) the testing of that electrical equipment or a component of that electrical equipment; and

(iv) fault finding in relation to that electrical equipment or a component of that electrical equipment;

(c) electrical installation work required to carry out a primary work function relating to low voltage fixed electrical equipment that involves—

(i) the disconnection of that electrical equipment or a component of that electrical equipment; and

(ii) the reconnection of that electrical equipment or component or the connection of other equipment or any component of equivalent power and current in the same location and without alteration to existing cables; and

(iii) the testing of that electrical equipment or a component of that electrical equipment;

(d) electrical inspection work of a class specified in Schedule 3.

PART 2—REGISTRATION OF ELECTRICAL CONTRACTORS

8 Applications for a grant of registration as an electrical contractor or renewal of registration

(1) A person may apply to Energy Safe Victoria for registration or renewal of registration as an electrical contractor.

(2) An application for registration must be in writing and contain or be accompanied by the following—

(a) the applicant's name and telephone number and the address of the applicant's residence and place of business;

(b) if the applicant will not be responsible for the effective supervision of electrical installation work or electrical switchgear fitting work carried out on behalf of the applicant, the name of the person who the applicant nominates to be the nominated technical supervisor who will be responsible for that work; and

(c) the declaration of each person nominated to be a technical supervisor of electrical contracting work that sets out the person's name and address and the person’s consent to be such a supervisor;

(d) if the applicant will not be responsible for the business management and administration of the electrical contracting work, the name of the person who the applicant nominates to be the business supervisor responsible for that management and administration; and

(e) a declaration of the person nominated to be the business supervisor of electrical contracting work that sets out the person's

name and address and the person's consent to be such a supervisor;

(f) a copy of the certificate of the Director of Consumer Affairs of the registration of any business name that the applicant will use;

(g) if the applicant is a member of a partnership, the name and address of each member of the partnership;

(h) in the case of an applicant which is a body corporate—

(i) a copy of the certificate of registration of the company under the Corporations Law;

(ii) the name and address of each director of the body corporate;

(iii) evidence that any person making an application on behalf of the body corporate is authorised to do so;

(i) evidence of the qualifications required by regulation 10 that the applicant relies on for registration;

(j) evidence that the applicant holds or will hold, at the time of carrying on electrical contracting, any insurance required by section 30 of the Act.

(3) An application for renewal of registration must be in writing and contain or be accompanied by the following—

(a) details of any changes in the information provided in the original application for the registration or for the most recent renewal of the registration or in any other circumstances relating to the application;

(b) evidence that the applicant holds or will hold, at the time of carrying on electrical contracting, any insurance required by section 30 of the Act.

(4) Energy Safe Victoria may require the applicant to provide further information or material in respect of an application.

(5) The prescribed fee—

(a) for an application for registration as an electrical contractor is 43.3 fee units;

(b) for an application for renewal of registration as an electrical contractor is 20.8 fee units.

9 Registration as an electrical contractor

(1) Energy Safe Victoria may register or renew the registration of an applicant if satisfied that—

(a) in the case of a natural person—

(i) the applicant will be responsible for the effective supervision of the electrical installation work or electrical switchgear fitting work carried out on behalf of the applicant; or

(ii) the applicant has nominated a natural person or a sufficient number of natural persons to be technical supervisors who will be responsible for that supervision; and

(b) in the case of a body corporate, that the applicant has nominated a natural person or a sufficient number of natural persons to be

technical supervisors who will be responsible for that supervision; and

(c) if the applicant will be responsible for the effective supervision of the electrical installation work or electrical switchgear fitting work, that the applicant is a licensed electrician or a licensed electrical switchgear worker who has completed the requirements specified in regulation 10; and

(d) that each person nominated under an application to which paragraph (a)(ii) or (b) relates to be responsible for the effective supervision of electrical installation work or electrical switchgear fitting work is a licensed electrician or a licensed electrical switchgear worker who has completed the requirements specified in regulation 10.

(2) Energy Safe Victoria may register or renew the registration of an applicant if satisfied that—

(a) in the case of a natural person—

(i) the applicant will be responsible for the business management and administration of the electrical contracting work; and

(ii) the applicant has nominated a natural person to be the business supervisor who will be responsible for that management and administration; or

(b) in the case of a body corporate, that the applicant has nominated a natural person to be the business supervisor who will be responsible for that management and administration; and

(c) if the applicant will be responsible for the business management and administration of the electrical contracting work, that the

applicant has completed the requirements specified in regulation 10; and

(d) that any person nominated under an application to which paragraph (a)(ii) or (b) relates to be responsible the business management and administration of the electrical contracting work has completed the requirements specified under regulation 10.

10 Qualification requirements for registration as an electrical contractor

(1) For the purposes of regulation 9, the requirements for a person to undertake effective supervision of electrical installation work are that the person is a licensed electrician who has—

(a) satisfactorily completed the Licensed Electricians Assessment (***LEA***) conducted by a body approved by Energy Safe Victoria; or

(b) satisfactorily completed a substantially equivalent examination conducted by Energy Safe Victoria or a body approved by Energy Safe Victoria; or

(c) has attained proficiency and experience in electrical installation work that is assessed by Energy Safe Victoria to be at least of an equivalent standard to the LEA; and

(2) For the purposes of regulation 9, the requirements for a person to undertake effective supervision of electrical switchgear fitting work are that the person is—

(a) a licensed electrical switchgear worker who has—

(i) successfully completed the Licensed Switchgear Worker's Assessment

(***LSWA***) conducted by a body approved by Energy Safe Victoria; or

(ii) successfully completed a substantially equivalent examination conducted by Energy Safe Victoria or a body approved by Energy Safe Victoria; or

(iii) has attained proficiency and experience in electrical switchgear fitting work that is assessed by Energy Safe Victoria to be at least of an equivalent standard to the LSWA; or

(b) a licensed electrician who complies with the requirements set out in subregulation (1) or (2)(a).

(3) For the purposes of regulation 9, the requirements for a person to be responsible for the business management and administration of the electrical contracting work are that the person has—

(a) successfully completed a course of training about establishing an electrical contracting business that is approved by Energy Safe Victoria; or

(b) passed an examination conducted by Energy Safe Victoria or a body approved by Energy Safe Victoria; or

(c) successfully completed an assessment or course of training or passed examinations which is at least of an equivalent standard to that required under paragraphs (a) or (b); or

(d) at least 5 years experience in the management and administration of an electrical contracting business.

11 Mutual recognition—contracting

Energy Safe Victoria may register an applicant who is registered or licensed as an electrical contractor in another State or Territory of Australia or in New Zealand if Energy Safe Victoria is satisfied that the applicant or any technical supervisor and business supervisor nominated under regulation 9—

(a) has successfully completed an assessment or course of training or passed examinations which are substantially equivalent to those required by regulation 10; or

(b) has qualifications, proficiency and experience in electrical contracting that is at least of an equivalent standard to that required by regulation 10;

12 Refusal of registration

Energy Safe Victoria may refuse to register or renew the registration of an applicant if it is satisfied that—

(a) a person nominated to be the technical supervisor is employed or appointed as the nominated technical supervisor of another electrical contractor and is not, or will not be, able to provide effective supervision of all the electrical installation work the person is responsible for supervising; or

(b) the applicant has contravened a provision of—

(i) the Act; or

(ii) these regulations; or

(ii) the Electricity Safety (Installations) Regulations 2009 or

(iii) a law of another State or a Territory or of New Zealand which substantially corresponds to the Act, these regulations or the Electricity Safety (Installations) Regulations 2009 ; or

(c) the applicant has attempted to obtain registration as an electrical contractor by fraud, misrepresentation or concealment of facts; or

(d) the applicant has been convicted of any offence involving fraud, dishonesty, drug trafficking or violence that was punishable by imprisonment for 6 months or more; or

(e) the applicant has been negligent or incompetent, or was a party to any negligence or incompetence, in connection with the carrying out of electrical installation work; or

(f) the applicant has engaged in fraudulent conduct in the carrying out of electrical installation work.

13 Prescribed insurance

For the purposes of section 30 of the Act, the prescribed insurance is insurance against public liability for personal injury or damage to property in connection with the electrical contracting work of the registered electrical contractor with a minimum cover of $ 5 000 000.

14 Conditions of registration

The following conditions of registration apply to a registered electrical contractor —

(a) if the electrical contractor has the qualifications referred to in regulation 10(1), all electrical installation work except that actually carried out by the electrical contractor must be effectively supervised by—

(i) the electrical contractor; or

(ii) in the case of electrical installation work, a nominated technical supervisor who has the qualifications set out in regulation 10(1); or

(iii) in the case of electrical switchgear fitting work, a nominated technical supervisor who has the qualifications set out in regulation 10(1) or 10(2)(a);

(b) if the electrical contractor has the qualifications referred to in regulation 10(2)(a)—

(i) all electrical switchgear fitting work except that actually carried out by the electrical contractor must be effectively supervised by —

(A) the electrical contractor; or

(B) a nominated technical supervisor who has the qualifications set out in regulation 10(1) or 10(2)(a); and

(ii) all other electrical installation work must be effectively supervised by a nominated technical supervisor who has the qualifications set out in regulation 10(1).

(c) if the electrical contractor does not have the qualifications referred to in regulation 10(1) or 10(2)(a) or the electrical contractor is not able to effectively supervise all electrical installation work or electrical switchgear fitting work carried out on behalf of the electrical contractor, that work must be effectively supervised by a nominated technical supervisor who has—

(i) in the case of the supervision of electrical installation work, the qualifications set out in regulation 10(1); and

(ii) in the case of the supervision of electrical switchgear fitting work, the qualifications set out in regulation 10(1) or 10(2)(a);

(d) the nomination of a nominated technical supervisor ceases if that supervisor is nominated to be the technical supervisor of another registered electrical contractor unless the supervisor is able to provide effective supervision of all electrical installation work for which the supervisor is responsible for supervising;

(e) the business of the electrical contracting work of the electrical contractor must be effectively managed and administered by—

(i) if the contractor has the qualifications set out in regulation 10(3)—

(A) the contractor; or

(B) a nominated business supervisor who has the qualifications set out in regulation 10(3); or

(ii) if the contractor does not have the qualifications set out in regulation

10(3), a nominated business supervisor who has the qualifications set out in regulation 10(3).

15 Obligations of registered contractors

(1) A registered electrical contractor must notify Energy Safe Victoria in writing of the following events within 10 business days after the relevant event occurs—

(a) any change in the information provided in the application for the original registration or for the most recent renewal of the registration;

(b) any change in the circumstances of the nominated technical supervisor that would affect the supervisor's ability to effectively supervise electrical installation work carried out by the electrical contractor;

(c) any change in the circumstances of the nominated business supervisor that would affect the supervisor's ability to be responsible for the management and administration of the business of the electrical contractor;

(d) if the contractor is a body corporate—

(i) any change of its name;

(ii) any change to the address of its principle place of business;

(iii) if it is deregistered under the Corporations Act;

(e) any change in the business name that the electrical contractor uses.

Penalty: 5 penalty units

(2) If the nominated technical supervisor of a registered electrical contractor ceases to carry out that function or is no longer able to effectively supervise electrical installation work carried out by the electrical contractor, the electrical contractor must—

(a) notify Energy Safe Victoria; and

(b) nominate another person who has the required qualifications; and

(c) send to Energy Safe Victoria a declaration by the person that sets out the person's name and address and the person's consent to be such a supervisor within 10 business days of that nomination.

Penalty: 5 penalty units

(3) If the nominated business supervisor of a registered electrical contractor ceases to carry out that function or is no longer able to be responsible for the management and administration of the business, the electrical contractor must—

(a) notify Energy Safe Victoria; and

(b) nominate another person who has the required qualifications; and

(c) send to Energy Safe Victoria a declaration from the person that sets out the person's name and address and the person's consent to be such a supervisor within 10 business days of that nomination.

Penalty: 5 penalty units

16 Cancellation of registration

(1) Energy Safe Victoria may cancel the registration of an electrical contractor who applies to it in writing for that cancellation.

(2) Energy Safe Victoria must cancel the registration of an electrical contractor who fails to apply for renewal of registration by the renewal date.

17 The register

(1) For the purposes of section 33(2) of the Act, the register must be kept in electronic form and contain the following information about each registered electrical contractor—

(a) the name and business address of the electrical contractor;

(b) the date of registration or renewal of registration;

(c) the registration number.

(2) A person's residential address must not appear on any part of the register that is available to the public unless the person—

(a) has nominated that address as the person's business address; or

(b) authorises Energy Safe Victoria to do so.

(3) A person may obtain a copy of an extract from the register.

(4) The prescribed fee for an extract from the register is 2.8 fee units.

18 Registration cards

(1) Energy Safe Victoria must issue a registration card to a registered electrical contractor that sets out the details of registration.

(2) A registration card issued to an electrical contractor under subregulation (1) is evidence of the registration of that contractor.

(3) A person who is issued with a registration card must, upon receipt of the registration card—

(a) sign the card; or

(b) in the case of a body corporate, ensure that the card is signed by the secretary or a director of the body corporate.

Penalty: 10 penalty units.

(4) An electrical contractor whose registration has been cancelled must deliver the contractor's registration card to Energy Safe Victoria within 10 business days after the contractor receives notice of the cancellation.

Penalty: 10 penalty units.

(5) If a registered electrical contractor demonstrates to Energy Safe Victoria that the registration card issued to the contractor has been lost, damaged, or destroyed, Energy Safe Victoria must, on payment of the prescribed fee, issue a duplicate registration card to that electrical contractor.

(6) The prescribed fee to issue a duplicate registration card is 2.8 fee units.

PART 3—LICENSING OF ELECTRICAL WORKERS

Division 1—Issue, renewal and cancellation of licences

19 Applications for issue of licences

(1) A person may apply to Energy Safe Victoria for a licence for one or more classes of electrical work.

(2) An application must be in writing and contain details of the following—

(a) the applicant's name, residential address, postal address and telephone number;

(b) the name and address of any current or former employer of the applicant, the period of the employment and the electrical work carried out under that employment;

(c) the applicant's experience in electrical work;

(d) any refusal of any regulatory authority to issue a licence to carry out electrical work or the cancellation or suspension of such a licence; and

(e) the class of electrical work for which the licence is being sought.

(3) An application must be accompanied by—

(a) evidence of the training and qualifications and experience on which the applicant relies for licensing; and

(b) in the case of an applicant for a licence under regulation 25 or 26,—

(i) a written description of the person's primary work function and of the electrical installation work required to carry out that function; and

(ii) written evidence that the electrical installation work is a necessary component of the person's primary work function.

(4) Energy Safe Victoria may require the applicant to provide proof of identity or any other information or material in respect of an application.

(5) The prescribed fee for a license application (other than a Restricted electrical worker's licence or Electrical inspector's licence) is 27.8 fee units.

(6) The prescribed fee for an application for a Restricted electrical worker's licence or Electrical inspector's license is 43.3 fee units.

20 Electrician's licence

Energy Safe Victoria may license a person to carry out all electrical installation work of the class prescribed in regulation 7(a) if Energy Safe Victoria is satisfied that—

(a) the person—

(i) has completed a 4 year contract of training as an electrician that included at least 12 months experience in carrying out electrical installation work; and

(ii) holds a Certificate III in Electrotechnology Electrician; and

(iii) has satisfactorily completed the Licensed Electricians Assessment conducted by Energy Safe Victoria or a body approved by Energy Safe Victoria; or

(b) the person's standard of qualifications, proficiency and experience in electrical

installation work is at least of an equivalent standard to that required under paragraph (a).

21 Supervised worker's licence

Energy Safe Victoria may license a person to carry out all electrical installation work of the class prescribed in regulation 7(a) under the effective supervision of a licensed electrician for a period not exceeding 3 years if Energy Safe Victoria is satisfied that—

(a) the person—

(i) has completed a 4 year contract of training as an electrical fitter; and

(ii) holds a Certificate III in Switchgear and Controlgear; and

(iii) has satisfactorily completed a practical examination conducted by Energy Safe Victoria or a body approved by Energy Safe Victoria in safe work practices; or

(b) the person has—

(i) completed a 4 year contract of training as an electrician that included at least 12 months experience in carrying out electrical installation work; and

(ii) partially completed the Certificate III in Electrotechnology Electrician; and

(iii) satisfactorily completed a practical examination conducted by Energy Safe Victoria or a body approved by Energy Safe Victoria in safe work practices; or

(c) the person's standard of qualifications, proficiency and experience in electrical installation work is at least of an equivalent standard to that required under paragraph (a) or (b).

22 Electrician (Supervised) worker's licence

A person who, immediately before the revocation of the Electricity Safety (Installations) Regulations 1999, held a licence that was issued under regulation 702(a) of the Electricity Safety (Installations) Regulations 1999 is eligible, at any time before the expiry of that licence to have issued to that person—

(a) a licence to carry out all electrical installation work of the class prescribed in regulation 7(a) subject to the condition that the person carry out all installation work under the effective supervision of a licensed electrician; and

(b) a licence to carry out all installation work of the class prescribed in regulation 7(c).

23 Occupier's licence

A person who, immediately before the revocation of the Electricity Safety (Installations) Regulations 1999, held a licence that was issued under regulation 304 of the Electricity Safety (Installations) Regulations 1999 is eligible, at any time before the expiry of that licence to have issued to that person a licence to carry out all electrical installation work of the class prescribed in regulation 7(a) that is limited to premises to which the person to be licensed occupies for residential purposes.

24 Electrical switchgear worker's licence

Energy Safe Victoria may license a person to carry out electrical installation work of the class prescribed in regulation 7(a) limited to the assembly, alteration, repair and maintenance of switchgear and controlgear assemblies if Energy Safe Victoria is satisfied that—

(a) the person—

(i) has completed a 4 year contract of training as an Electrical Fitter that included at least 12 months experience in carrying out electrical switchgear fitting work; and

(ii) holds a Certificate III in Switchgear and Controlgear; and

(iii) has satisfactorily completed the Licensed Switchgear Worker's Assessment conducted by Energy Safe Victoria or a body approved by Energy Safe Victoria; or

(b) the person's standard of qualifications, proficiency and experience in electrical switchgear fitting work is at least of an equivalent standard to that required under paragraph (a).

25 Restricted electrical worker's licence (Class 1)

(1) A person may apply for a licence to carry out restricted electrical installation work of a class prescribed in regulation 7(b) if the person—

(a) is required to undertake the restricted electrical installation work because it is central to the person's primary work function; or

(b) has a demonstrated need to undertake the restricted electrical installation work because the work is ancillary to a primary work function.

(2) In determining whether a person has a demonstrated need under subregulation (1)(b), Energy Safe Victoria may take in to account any of the following—

(a) whether it is impractical or inefficient to require a licensed electrician to undertake the proposed restricted electrical installation work in all instances;

(b) whether the need to undertake the restricted electrical installation work is sufficiently frequent;

(c) whether there is a sufficient connection between the proposed electrical installation work and the person's primary work function;

(d) whether the level of risk associated with the proposed restricted electrical installation work outweighs the person's demonstrated need;

(e) any other relevant matters.

(3) Energy Safe Victoria may license a person who has made an application under subregulation (1) if Energy Safe Victoria is satisfied that—

(a) the person has—

(i) the qualifications or training (if any) required to carry out the primary work function; and

(ii) satisfactorily completed a course of instruction decided by Energy Safe Victoria; and

(iii) satisfactorily completed a practical examination conducted by Energy Safe Victoria or a body approved by Energy Safe Victoria in safely disconnecting, reconnecting and testing electrical equipment and fault finding; or

(b) the person's standard of qualifications, proficiency and experience in the primary work function and electrical installation work is at least of an equivalent standard to that required under paragraph (a).

(4) Energy Safe Victoria must limit the type of electrical installation work that the licensed person may undertake under the licence by reference to the occupational area or areas specified in Schedule 2.

26 Restricted electrical worker's licence (Class 2)

(1) A person may apply for a licence to carry out restricted electrical installation work of a class prescribed in regulation 7(c) if the person—

(a) is required to undertake the restricted electrical installation work because it is central to the person's primary work function; or

(b) has a demonstrated need to undertake the restricted electrical installation work because the work is ancillary to a primary work function.

(2) In determining whether a person has a demonstrated need under subregulation (1)(b), Energy Safe Victoria may take in to account any of the following—

(a) whether it is impractical or inefficient to require a licensed electrician to undertake the

proposed restricted electrical installation work in all instances;

(b) whether the need to undertake the restricted electrical installation work is sufficiently frequent;

(c) whether there is a sufficient connection between the proposed electrical installation work and the person's primary work function;

(d) whether the level of risk associated with the proposed restricted electrical installation work outweighs the person's demonstrated need;

(e) any other relevant matters.

(3) Energy Safe Victoria may license a person who has made an application under subregulation (1) if Energy Safe Victoria is satisfied that—

(a) the person has—

(i) the qualifications or training (if any) required to carry out the primary work function; and

(ii) satisfactorily completed a course of instruction decided by Energy Safe Victoria; and

(iii) satisfactorily completed a practical examination conducted by Energy Safe Victoria or a body approved by Energy Safe Victoria in safely disconnecting, reconnecting and testing electrical equipment; or

(b) the person's standard of qualifications, proficiency and experience in the primary work function and electrical installation work is at least of an equivalent standard to that required under paragraph (a).

(4) Energy Safe Victoria must limit the type of electrical installation work that the licensed person may undertake under the licence by reference to the occupational area or areas specified in Schedule 2.

27 Electrical inspector's licence

Energy Safe Victoria may license a person to carry out electrical inspection work of any or all of the classes (except class "L") prescribed in Part A of Schedule 3 if—

(a) the person—

(i) has demonstrated to the satisfaction of Energy Safe Victoria the qualifications, experience, competence and proficiency in the matters set out in Part B of Schedule 3 for the relevant class of electrical inspection work; and

(ii) if required by Energy Safe Victoria to do so, has satisfactorily completed a practical examination in electrical inspection work conducted by Energy Safe Victoria or a body approved by Energy Safe Victoria; or

(b) the person's standard of qualifications, proficiency and experience in electrical installation work is at least of an equivalent standard to that required under paragraph (a).

28 Class "L" inspector's license

A person who, immediately before the revocation of the Electricity Safety (Installations) Regulations 1999, held a licence that was issued under regulation 306 to carry out electrical

inspection work prescribed as class "L" in Part A of Schedule 4 of the Electricity Safety (Installations) Regulations 1999 is eligible, at any time before the expiry of that licence, to have issued to that person a licence to carry out electrical inspection work prescribed as class "L" in Part A of Schedule 3.

29 Mutual recognition—licensing

Energy Safe Victoria may license an applicant who is registered or licensed as an electrical worker in another State or Territory of Australia or in New Zealand if Energy Safe Victoria is satisfied that the applicant has successfully completed an assessment or course of training or passed examinations which are substantially equivalent to those set out in this division.

30 Mutual recognition—electricians taken to be licensed in Victoria

(1) A person—

(a) who is the holder of a licence or authority issued by an Australian regulatory authority (other than Energy Safe Victoria), which is the equivalent of an electrician's licence; and

(b) who is not ordinarily resident in the State—

is taken to be licensed under regulation 20, provided that the person notifies Energy Safe Victoria in accordance with this regulation.

(2) The notification must be given in the manner approved by Energy Safe Victoria and must include—

(a) the person's name, residential address, postal address and telephone number; and

(b) the details of the licence or authority that they hold; and

(c) a statement that the person consents to the making of enquiries and the exchange of information with any Australian regulatory authority in relation to any licence or authority that the person holds.

(3) A person taken to be licensed under this regulation must notify Energy Safe Victoria within 10 business days after any change in that person's name, address or status of the license or authority they hold.

Penalty: 20 penalty units.

31 Refusal of licence

Energy Safe Victoria may refuse to issue a licence to an applicant if Energy Safe Victoria is satisfied that—

(a) the applicant has not complied with these Regulations in relation to the class of licence applied for; or

(b) the applicant has contravened a provision of—

(i) the Act; or

(ii) these regulations; or

(ii) the Electricity Safety (Installations) Regulations 2009; or

(iii) a law of another State or a Territory or of New Zealand which substantially corresponds to the Act or these regulations or the Electricity Safety (Installations) Regulations 2009; or

(c) the applicant has attempted to obtain a licence as an electrical worker by fraud, misrepresentation or concealment of facts; or

(d) the applicant has been convicted of any offence involving fraud, dishonesty, drug trafficking or violence that was punishable by imprisonment for 6 months or more; or

(e) the applicant has been negligent or incompetent, or was a party to any negligence or incompetence, in connection with the carrying out of electrical work; or

(f) the applicant has engaged in fraudulent conduct in the carrying out of electrical work.

32 Renewal of licences

(1) Subject to this regulation a licensed electrical worker, other than the holder of a licence under regulation 21, may apply to Energy Safe Victoria for renewal of the worker's licence.

(2) A licensed electrical worker cannot apply for renewal of the workers license if that licence is a class “F” inspection licence, class “R” inspection licence or class “S” inspection licence.

(3) An application for renewal of a licence must be in writing and contain details of any changes in the information provided in the application for the licence or for the most recent renewal of the licence or in any other circumstances relating to the application.

(4) Energy Safe Victoria may require the applicant to provide further information or material relating to the competence of the worker to carry out the class of electrical work for which the licence is to be renewed.

(5) The prescribed fee for an application for the renewal of a licence (other than a Restricted electrical worker's licence or Electrical inspector's licence)is 13.9 fee units.

(6) The prescribed fee for an application for the renewal of a Restricted electrical worker's licence or Electrical inspector's license is 20.8 fee units.

(7) Energy Safe Victoria may refuse to renew the licence of an electrical worker on any of the grounds set out in regulation 31.

(8) In this regulation—

class "F" inspection licence means a licence issued under regulation 306 of the Electricity Safety (Installations) Regulations 1999 for class "F" inspection work;

class "R" inspection licence means a licence issued under regulation 306 of the Electricity Safety (Installations) Regulations 1999 for class "R" inspection work;

class "S" inspection licence means a licence issued under regulation 306 of the Electricity Safety (Installations) Regulations 1999 for class "S" inspection work.

33 Cancellation of licence

(1) Energy Safe Victoria may cancel the licence of an electrical worker who surrenders the written licence for cancellation or applies to Energy Safe Victoria in writing for the issue of a licence of another class.

(2) Energy Safe Victoria must cancel the licence of an electrical worker who does not apply for renewal of the licence by the renewal date specified on the licence card.

Division 2—General

34 Apprentices

For the purposes of section 39 of the Act, an apprentice is required to carry out all electrical installation work under the effective supervision of—

(a) a licensed electrician; or

(b) in the case of electrical switchgear fitting work—

(i) a licensed electrician; or

(ii) a licensed electrical switchgear worker.

35 Change of name or address

The holder of a licence must notify Energy Safe Victoria within 10 business days after any change in that person's name or address.

Penalty: 10 penalty units.

36 Licence cards

(1) Energy Safe Victoria must issue a license card to a licensed electrical worker.

(2) A license card issued to a licensed electrical worker under subregulation (1) is evidence that the electrical worker is licensed by Energy Safe Victoria to carry out a particular class of electrical work.

(3) A person who is issued with a licence card must, upon receipt of the card, sign the card.

Penalty: 10 penalty units.

(4) An electrical worker whose licence has been cancelled must deliver the licence card to Energy Safe Victoria within 10 business days after the worker receives notice of the cancellation.

Penalty: 10 penalty units.

(5) If a licensed electrical worker demonstrates to Energy Safe Victoria that the licence card issued to the worker has been lost, damaged, or destroyed, Energy Safe Victoria must, on payment of the prescribed fee, issue a duplicate card to that electrical worker.

(6) The prescribed fee for the issue of a duplicate licence is 2.8 fee units.

37 Licence to be produced on demand

A person who is carrying out a prescribed class of electrical work must, at the request of an enforcement officer, produce the person's licence card to the enforcement officer or provide details of the person's licence to the officer.

Penalty: 10 penalty units.

PART 4—FEES

38 Fees—Rebates

(1) Energy Safe Victoria may rebate the payment of an application fee for the issue or renewal of a registration for an electrical contractor if the registration is to be issued for a period of less than 5 years.

(2) Energy Safe Victoria may rebate the payment of an application fee for the issue or renewal of a licence for an electrical installation worker if the licence is to be issued for a period of less than 5 years.

39 Fees—Refunds

Energy Safe Victoria may refund part of the application fee for the issue or renewal of a licence for an electrical installation worker if the licence is to be cancelled for the issue of a licence of another class.

PART 5—INFRINGEMENT NOTICES

40 Provisions under which infringement notices may be served

(1) For the purposes of paragraph (b) of the definition of *prescribed offence* in section 140A of the Act, regulations 15(1), (2) and (3), 18(3)(a), (3)(b) and (4), 30(3), 35, 36(3) and (4), and 37 are prescribed provisions.

(2) Regulation 5(e) of the Electricity Safety (Infringements) Regulations 2000[1] is **revoked**.

PART 6—RELATED AMENDMENTS

41 Amendments to Electricity Safety (Installations) Regulations 2009

In regulation 105 of the Electricity Safety (Installations) Regulations 2009[2]—

(a) for the definition of ***licensed electrician*** **substitute**—

"***licensed electrician*** means an electrical installation worker holding an electrician's licence under Part 3 of the Electricity Safety (Registration and Licensing) Regulations 2010;"; and

(b) for the definition of ***licensed electrical inspector*** **substitute**—

"***licensed electrical inspector*** means a person holding an inspector's licence under Part 3 of the Electricity Safety (Registration and Licensing) Regulations 2010;"; and

(c) for the definition of ***registered electrical contractor*** **substitute**—

"***registered electrical contractor*** means an electrical contractor registered under Part 2 of the Electricity Safety (Registration and Licensing) Regulations 2010;".

PART 7—TRANSITIONALS

42 Transitional—Disconnect/reconnect worker's licence

(1) In this regulation—

commencement day means the day on which these Regulations come into operation;

old Regulations means the Electricity Safety (Installations) Regulations 1999.

(2) A person who immediately before the commencement day was the holder of a Disconnect/reconnect licence issued under regulation 304 of the old regulations is taken to hold a Restricted electrical worker's licence (Class 2) until the expiry date specified of the licence.

Note

See also section 28 of the **Interpretation of Legislation Act 1984**.

SCHEDULES

SCHEDULE 1

REVOKED REGULATIONS

S.R. No.	*Title*
49/1999	Electricity Safety (Installations) Regulations 1999
3/2001	Electricity Safety (Installations) (Amendment) Regulations 2001
58/2004	Electricity Safety (Installations) (Amendment) Regulations 2004

SCHEDULE 2

OCCUPATIONAL AREAS

1. Airconditioning and Refrigeration
2. Instrumentation
3. Electronics
4. Water Heaters
5. Electrical Appliances
6. Pre-assembled Neon Signs
7. Composite Equipment
8. Control Devices
9. Gas Appliances
10. Motors
11. Hazardous Area Equipment

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SCHEDULE 3

PART A—PRESCRIBED CLASSES OF ELECTRICAL INSPECTION WORK

Class	*Description*
L	Electrical equipment installed in installations comprising a low voltage single phase, 2 wire supply comprising consumers mains, main earthing systems, consumer terminals connection devices or those parts of main switchboards that are related to the control of installations and the protection against the spread of fire but does not include electrical equipment installed as part of a part 1 solution.
G	Any low voltage installations except— (i) class H; and (ii) class M; and (iii) electric fences intended primarily for the control or containment of animals.
H	Electrical equipment installed in a hazardous area and electrical equipment associated with the protection of the hazardous area but not installed within the hazardous area.
V	High voltage installations except high voltage electrical equipment that is— (i) associated with an electric discharge lighting system; or (ii) associated with X-ray equipment; or (iii) associated with high frequency equipment; or (iv) within self contained equipment supplied at low voltage; or (v) associated with electric fences intended primarily for the control or containment of animals
M	Fixed electrical equipment installed in a patient area..

PART B—REQUIRED QUALIFICATIONS, PROFICIENCY AND EXPERIENCE IN ELECTRICAL INSPECTION WORK

Class	*Description*
L	1. A detailed understanding of safety in electrical installations.
	2. Testing methods for electrical installations.
	3. The requirements of these Regulations for consumers mains, main earthing systems, main switchboards and consumer terminals connection devices.
G	1. A detailed understanding of safety in electrical installations that are covered by this class.
	2. Testing methods for electrical installations that are covered by this class.
	3. The requirements of the Regulations relating to low voltage electrical installations.
H	1. A detailed understanding of safety in electrical installations in hazardous areas.
	2. Testing methods in hazardous areas and for electrical equipment associated with the protection of hazardous areas.
	3. The requirements of these Regulations for electrical installations in hazardous areas and electrical equipment associated with the protection of hazardous areas.
V	1. A detailed understanding of safety in high voltage electrical installations.
	2. Testing methods for high voltage installations.
	3. The requirements of these Regulations for high voltage electrical installations.
M	1. A detailed understanding of safety in fixed electrical equipment installed in a patient area.
	2. Testing methods for electrical installations in those areas.
	3. The requirements of these Regulations for those areas.

ENDNOTES

Explanatory Details

[1] Reg. 40(2): S.R. No. 136/2000.

[2] Reg. 41: S.R. No. 164/2009.

Fee Units

These Regulations provide for fees by reference to fee units within the meaning of the **Monetary Units Act 2004**.

The amount of the fee is to be calculated, in accordance with section 7 of that Act, by multiplying the number of fee units applicable by the value of a fee unit.

The value of a fee unit for the financial year commencing 1 July 2009 is $11.69. The amount of the calculated fee may be rounded to the nearest 10 cents.

The value of a fee unit for future financial years is to be fixed by the Treasurer under section 5 of the **Monetary Units Act 2004**. The value of a fee unit for a financial year must be published in the Government Gazette and a Victorian newspaper before 1 June in the preceding financial year.

Penalty Units

These Regulations provide for penalties by reference to penalty units within the meaning of section 110 of the **Sentencing Act 1991**. The amount of the penalty is to be calculated, in accordance with section 7 of the **Monetary Units Act 2004**, by multiplying the number of penalty units applicable by the value of a penalty unit.

The value of a penalty unit for the financial year commencing 1 July 2009 is $116.82.

The amount of the calculated penalty may be rounded to the nearest dollar.

The value of a penalty unit for future financial years is to be fixed by the Treasurer under section 5 of the **Monetary Units Act 2004**. The value of a penalty unit for a financial year must be published in the Government Gazette and a Victorian newspaper before 1 June in the preceding financial year.

Table/s of Applied, Adopted or Incorporated Matter

The following table of applied, adopted or incorporated matter is included in accordance with the requirements of regulation 5 of the Subordinate Legislation Regulations 1994.

Statutory Rule Provision	**Title of applied, adopted or incorporated document**	**Matter in applied, adopted or incorporated document**
Regulation 4 def. of ***Australian/New Zealand Wiring Rules***	Australian/New Zealand Standard, ' Electrical Installations (known as the Australian/New Zealand Wiring Rules) AS/NZS 3000.	The whole
Regulation 4 def of ***AS/NZS 3003***	Australian/New Zealand Standard, 'Electrical installations - Patient treatment areas of hospitals and medical, dental practices and dialyzing locations', AS/NZS 3003.	The whole