# Guideline for Application of Certificate of Competency as Chargeman

Under The Electricity Ordinance (Chapter 50) and the Electricity Rules, 1999

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# Chargeman Electrical Inspectorate Unit

A. Application and downloads

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llabus		
Log Sheet		
Document Checklist (New Category)		
Document Checklist ("Restricted" Switching Category)		
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Fulfilling of requirements and pre-requisites can be in any		
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B. General requirement

В.	General requirement				
No	Description	Requirements			
1	Citizen	Malaysian			
2	Minimum Age	20 years and above (as at issuance of competency certificate)			
3	Educational qualification	Able to undergo course and examination			
4	Working Experience	Not less than three years in an environment where electrical equipment is in operation and has had experience of controlling live equipment.			
5	Skill and knowledge	<ul> <li>Attend course and pass examination for theory and practical parts;</li> <li>Knowledge of first aid, resuscitation and treatment of electric shock;</li> <li>Pass open book examination for Electricity Ordinance and the Electricity Rules, 1999 (EOER), if required; and</li> <li>Pass interview by a panel in the case of: <ol> <li>Applying high voltage category; and/ or</li> <li>Applying switching category/ endorsement.</li> </ol> </li> </ul>			

C. Competency certificate categories

Category				Switching in certificate with category
Low	L1	Main switch board and auxiliaries	=	As
Voltage	L2(O/H)	Overhead lines and auxiliaries	.=	endorsement
	L2(U/G)	Underground cable lying and auxiliaries	-	on certificate
	L3	Generating stations .	L1	
	L4 (GC)	Grid – Connected Low Voltage Photovoltaic (PV) System	L1	
	L4 (OG)	Off – Grid Low Voltage Photovoltaic (PV) System	L1	
High	H1	Electrical substation and auxiliaries	L1	
Voltage	H2(O/H)	Overhead lines and auxiliaries	L2(O/H)	
(Voltage	H2(U/G)	Underground cable lying and auxiliaries	L2(U/G)	
higher than Low Voltage)	Н3	Generating stations	L3	

Switching	Voltage Level	Switching Classes	Pre-Requisite
Restricted (at designated premises)	up to 11 kV up to 33 kV up to 132 kV up to 275 kV up to 500kV	Class 1 - Authorize to issue and cancel electrical permit to work Class 2 - Not authorize to issue and cancel electrical permit to work	<ol> <li>Certificate holder with high voltage category/(ies)</li> <li>If no longer employed, designated switching endorsement is removed.</li> <li>Switching may be re-instated at new designated work premises.</li> <li>Certificate holder with low-voltage category(ies)</li> <li>If no longer employed, designated switching endorsement is removed.</li> <li>Switching may be re-instated at new designated work premises.</li> <li>Certificate without Category</li> <li>If no longer employed at designated premises, Certificate is revoked.</li> <li>Certificate may be re-issued if employed at new designated premises.</li> <li>Submit required documents (Refer to checklist)</li> </ol>
Open (throughout the state)	up to 11 kV up to 33 kV up to 132 kV up to 275 kV up to 500kV	Class 1 - Authorize to issue and cancel electrical permit to work Class 2 - Not authorize to issue and cancel electrical permit to work	<ol> <li>Only holder with high voltage category(ies); and</li> <li>Attended relevant course and switching attachment</li> </ol>

#### D. Courses and examinations

Course Name	Type	Minimum Course Duration	Course Entry Requirement	On the Job Training	Remarks
Chargeman L1 & L3	Full time	9 Months	<ul> <li>Full Time Wireman First Grade Course; and</li> <li>Holder of Certificate of Competency as a Wireman First Grade; or</li> <li>Certificate in Engineering on Electrical</li> <li>Note: Full time competency course duration shall be factored in as a relevant working experience.</li> </ul>	6 months to include L1 and L3 and to be verified by employer/ competent person in EIU format log book (At least 4 months on L1 and 1 month on L3)	<ul> <li>Pass examination on theory and practical parts; and</li> <li>Upon completion, Certificate will be issued.</li> </ul>
			Those without or limited work experience at time of enrolment.	2 weeks to be verified by employer/ competent person in EIU format log book	<ul> <li>Pass examination for theory and practical parts; and</li> <li>If passed, candidate to meet further cumulative 3 years required working experience to be verified by employer/competent person on environment where electrical equipment is in operation &amp; has experience of controlling live equipment.</li> </ul>
Chargeman L1	Part time	96 hours	3 years working experience to be verified by employer/ competent person on environment where electrical equipment is in operation & has experience of controlling live equipment	2 weeks to be verified by employer/ competent person in EIU format log book	

- Pass open-book examination for the Electricity Ordinance and Electricity Rules, 1999 (EOER)
- · Accredited Institution may impose their own course entry requirement

Course Name	Туре	Minimum Course Duration	Course Entry Requirement	On the Job Training	Remarks
Chargeman L1	Part time	96 hours	Those without or limited work experience at time of enrolment.	2 weeks to be verified by employer/ competent person in EIU format log book	<ul> <li>Pass examination for theory and practical parts; and</li> <li>If passed, candidate to meet further cumulative 3 years required working experience to be verified by employer/competent person on environment where electrical equipment is in operation &amp; has experience of controlling live equipment.</li> </ul>
Chargeman L3	Part time	Table 14 to the control of the contr	Holder of Certificate of Competency as a Chargeman with L1 category	2 weeks to be verified by employer/ competent person in EIU format log Book	<ul> <li>Pass examination on theory and practical parts; and</li> <li>Upon completion, Certificate will be issued.</li> </ul>
	,		Those without or limited work experience at time of enrolment; and/or Without pre-requisite Chargeman L1	2 weeks to be verified by employer/ competent person in EIU format log Book	Pass examination for theory and practical parts; and     If passed, candidate must acquire Chargeman L1 prerequisite before certificate is issued.

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Course Name	Туре	Minimum Course Duration	Course Entry Requirement	On the Job Training	Remarks
Chargeman L2	Full time	6 months (At least 4 months on L2 (O/H) and 2 months L2 (U/G))	<ul> <li>Full Time Wireman First Grade Course at EIU accredited Institutions; or</li> <li>Holder of Certificate of Competency as a Wireman First Grade; or</li> <li>Certificate in Engineering on Electrical</li> </ul> Note: Full time competency course duration shall be factored in as the a relevant working experience	6 months to be verified by employer/ competent person in EIU format log book (At least 2 months on L2 (O/H) and 2 months on L2 (U/G))	<ul> <li>Pass examination on theory and practical parts; and</li> <li>Upon completion, Certificate will be issued.</li> </ul>
			Those without or limited work experience at time of enrolment; and/or Without pre-requisite Chargeman L1	2 weeks to be verified by employer/ competent person in EIU format log Book	Pass examination for theory and practical parts; and     If passed, candidate to meet further cumulative 3 years required working experience to be verified by employer/competent person on environment where electrical equipment is in operation & has experience of controlling live equipment.
Chargeman L2 (O/H)	Part time	32 hours	3 years working experience to be verified by employer/ competent person on environment where electrical equipment is in operation & has experience of controlling live equipment	2 weeks to be verified by employer/ competent person in EIU format log book	<ul> <li>Pass examination on theory and practical parts; and</li> <li>Upon completion, Certificate will be issued.</li> </ul>

- Pass open-book examination for the Electricity Ordinance and Electricity Rules, 1999 (EOER)
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Course Name	Туре	Minimum Course Duration	Course Entry Requirement	On the Job Training	Remarks
Chargeman L2 (O/H)	Part time	32 hours	Those without or limited work experience at time of enrolment; and/or Without pre-requisite Chargeman L1	2 weeks to be verified by employer/ competent person in EIU format log Book	<ul> <li>Pass examination for theory and practical parts; and</li> <li>If passed, candidate to meet further cumulative 3 years required working experience to be verified by employer/competent person on environment where electrical equipment is in operation &amp; has experience of controlling live equipment.</li> </ul>
Chargeman L2 (U/G)	Part time	24 hours	3 years working experience to be verified by employer/ competent person on environment where electrical equipment is in operation & has experience of controlling live equipment	2 weeks to be verified by employer/competent person in EIU format log book	<ul> <li>Pass examination on theory and practical parts; and</li> <li>Upon completion, Certificate will be issued.</li> </ul>
			Those without or limited work experience at time of enrolment; and/or Without pre-requisite Chargeman L1	2 weeks to be verified by employer/ competent person in EIU format log Book	Pass examination for theory and practical parts; and     If passed, candidate to meet further cumulative 3 years required working experience to be verified by employer/competent person on environment where electrical equipment is in operation & has experience of controlling live equipment.

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Course Name	Туре	Minimum Course Duration	Course Entry Requirement	On the Job Training	Remarks
Chargeman L4	Part time	32 hours	3 years working experience required to be verified by employer / competent person on environment where electrical equipment is in operation & has experience of controlling live equipment.	Not Available	<ul> <li>Pass examination on theory and practical parts; and</li> <li>Upon completion, Certificate will be issued.</li> </ul>
Chargeman H2(O/H) up to 11kV	Part time	32 hours	Holder of Certificate of Competency as a Chargeman L2(O/H) category	2 weeks to be verified by employer/ competent person in EIU format log book	<ul> <li>Pass examination on theory and practical parts; and</li> <li>Upon completion, Certificate will be issued.</li> </ul>
			Those without or limited work experience at time of enrolment; and/or Without pre-requisite Chargeman L1	2 weeks to be verified by employer/ competent person in EIU format log Book	<ul> <li>Pass examination for theory and practical parts; and</li> <li>If passed, candidate must acquire Chargeman L2 (O/H) pre-requisite before certificate is issued.</li> </ul>
Chargeman H2(U/G) up to 11kV	Part time	16 hours	Holder of Certificate of Competency as a Chargeman with L2(U/G) category	2 weeks to be verified by employer / competent person in EIU format log book	<ul> <li>Pass examination on theory and practical parts; and</li> <li>Upon completion, Certificate will be issued.</li> </ul>
			Those without or limited work experience at time of enrolment; and/or Without pre-requisite Chargeman L1	2 weeks to be verified by employer/ competent person in EIU format log Book	Pass examination for theory and practical parts; and     If passed, candidate must acquire Chargeman L2 (U/G) pre-requisite before certificate is issued.

- Pass open-book examination for the Electricity Ordinance and Electricity Rules, 1999 (EOER)
- Accredited Institution may impose their own course entry requirement

#### E. Fees

No	Ty	pes of Application	Fees	
1	Ini	itial Registration		
	i	Low voltage	RM 50	
	ii	Voltage higher than low voltage	RM 100	
2	Re	enewal (annually)	RM 150	
	i	Low voltage	RM 50	
	ii	Voltage higher than low voltage	RM 100	
3	Endorsement (i.e. upgrade)		RM 50	
4	Re	eplacement (i.e. lost, destroyed)	. RM 100	

F. Syllabus

No	Document	
1	Syllabus for Chargeman Examination	
2	Syllabus for First Aid Course	

G. Preparation of document

No	Document	Copy
1	Chargeman with voltage higher than low voltage category	
i	Document Checklist for Submission	5
	(voltage higher than low voltage category)	
ii	Photo copy of Identification Card (IC)	5
iii	Testimonial of employment	5
iv	Log Sheet	5
2	Chargeman with "Restricted" switching endorsement/ category	
i	Document Checklist for Submission (Restricted Switching)	1
ii	Form CAAC 11	1
iii	Photo copy of Identification Card (IC)	2
iv	Authorization letter and support letter from installation owner	2
V	Switching log	2
vi	Switching Procedure Manual	2
vii	Switching Schematic Diagram	2
viii	Testimonial of employment	2

All documents in item (G) are to be submitted to:

Electrical Inspectorate Unit 11<sup>th</sup> Floor Wisma Satok, Jalan Satok, 93400 Kuching, Sarawak

- Pass open-book examination for the Electricity Ordinance and Electricity Rules, 1999 (EOER)
- · Accredited Institution may impose their own course entry requirement

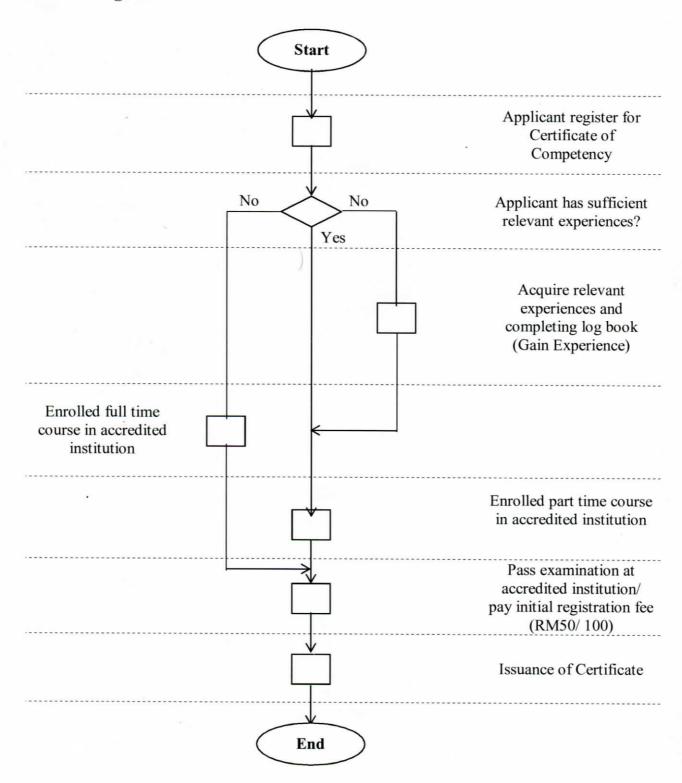
#### H. Document for renewal of certificate

No	Document	
1	Recent testimonial of employment (if any)	
2	Copy of most recent valid First Aid certificate	
3	Copy of certificate of recent relevant courses attended (if any)	

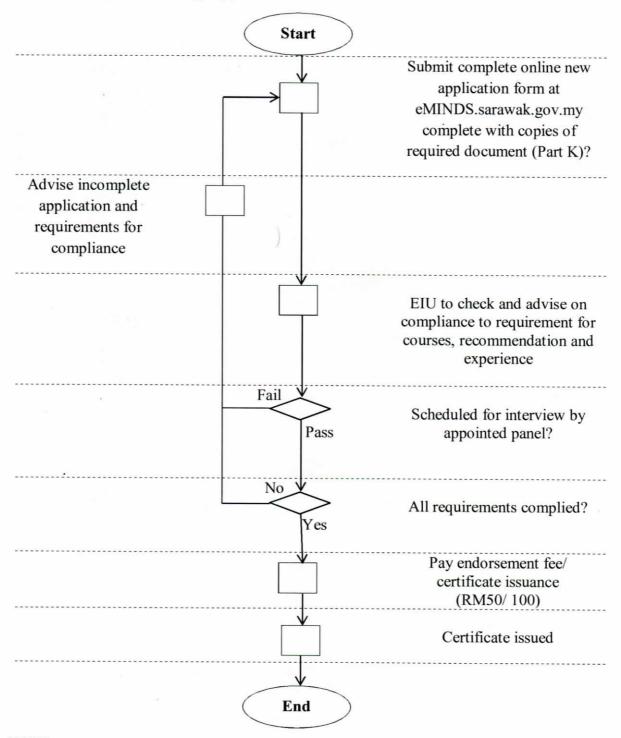
All documents in item (H) are to be uploaded at: eMINDS@sarawak.gov.my

- Pass open-book examination for the Electricity Ordinance and Electricity Rules, 1999 (EOER)
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### I. Procedure for new application of Certificate of Competency as a Chargeman

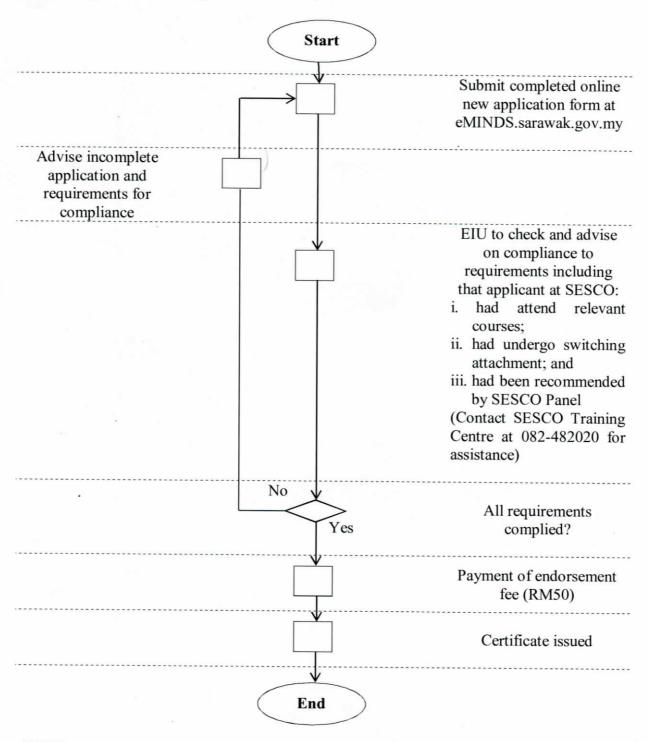


# J. Procedure for upgrade of Certificate of Competency as a Chargeman (voltage higher than low voltage or 'Restricted' switching endorsement/ category)



- Restricted Switching endorsement/ category will indicate designated premises on Certificate of Competency for Chargeman/ Electrical Supervisor/ Competent Electrical Engineer
- 2. Switching if:
  - "Restricted" applicable for designated premises.
  - "Open" applicable for throughout the state.

## K. Procedure for upgrade of Certificate of Competency as a Chargeman ('Open' switching endorsement)



- Restricted Switching endorsement/ category will indicate designated premises on Certificate of Competency for Chargeman/ Electrical Supervisor/ Competent Electrical Engineer
- 2. Switching if:
  - "Restricted" applicable for designated premises.
  - "Open" applicable for throughout the state.

#### L. Procedure for renewal of Certificate of Competency as a Chargeman

