

Guideline for Application of Certificate of Competency as a Chargeman

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

English Version 8.0



Electrical Inspectorate Unit

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ENGLISH VERSION 8

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CHARGEMAN Electrical Inspectorate Unit

A. Application and downloads

Chargeman	Online Application Medium	1. eUtilities System (https://eutilities.sarawak.gov.my) 2. Service Sarawak (https://sarawak.gov.my)
	Information Available for Download in MUT's Official Website	Chargeman Examination Syllabus
		Chargeman Logbook Guideline
		Log Sheet
		Document Checklist (New Category)
		Document Checklist ("Restricted" Switching Category)
	List of Accredited Institutions	
Certificate Issuance	Fulfilling of requirements and pre-requisites can be in any sequence, but Certificate issued upon ALL requirements and pre-requisites fulfilled	

B. 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 (3) years' experience in an environment where electrical equipment is in operation and has had experience of controlling live equipment.
5	Skill and knowledge	<ul style="list-style-type: none"> • Attend course and pass examination for theory and practical parts. • Knowledge of first aid, resuscitation, and treatment of electric shock. • Pass open book examination for Electricity Ordinance and the Electricity Rules, 1999 (EOER) if required; and • Pass interview by a panel in the case of: <ul style="list-style-type: none"> i. Applying high voltage category; and/ or ii. Applying switching category/ endorsement.

C. Competency certificate categories

Category		Description	Pre-requisite	Switching in certificate with category
Low Voltage	LI	Main switch board and auxiliaries	-	As endorsement on certificate
	L2(O/H)	Overhead lines and auxiliaries	-	
	L2(U/G)	Underground cable lying and auxiliaries	-	
	L3	Generating stations	L1	
	L4 (GC)	Grid- Connected Low Voltage Photovoltaic (PV) System	L1	
	L4 (OG)	Off- Grid Low Voltage Photovoltaic (PV) System	L1	
	L4	Off-Grid and Grid Connected Low Voltage Photovoltaic (PV) System	L1	
High Voltage (Voltage higher than Low Voltage)	H1	Electrical substation and auxiliaries	L1	
	H2(O/H)	Overhead lines and auxiliaries	L2(O/H)	
	H2(U/G)	Underground cable lying and auxiliaries	L2(U/G)	
	H3	Generating stations	L1 & L3	

Switching	Voltage Level	Switching Classes	Pre-Requisite
<p>Restricted (at designated premises)</p>	<p>up to 11 kV up to 33 kV up to 132 kV up to 275 kV up to 500kV</p>	<p>Class I - Authorize to issue and cancel electrical permit to work.</p> <p>Class 2 - Not authorize to issue and cancel electrical permit to work.</p>	<p>1. Certificate holder with high voltage category/(ies)</p> <ul style="list-style-type: none"> • If no longer employed, designated switching endorsement is removed. • Switching may be re-instated at new designated work premises. <p>2. Certificate holder with low-voltage category(ies)</p> <ul style="list-style-type: none"> • If no longer employed, designated switching endorsement is removed. • Switching may be re-instated at new-designated work premises. <p>3. Certificate without Category</p> <ul style="list-style-type: none"> • If no longer employed at designated premises, the Certificate is revoked. • Certificate may be re-issued if employed at new designated premises. <p>4. Submit required documents (Refer to checklist)</p>
<p>Open (throughout the state)</p>	<p>up to 11 kV up to 33 kV up to 132 kV up to 275 kV up to 500kV</p>	<p>Class 1 - Authorize to issue and cancel electrical permit to work.</p> <p>Class 2 - Not authorize to issue and cancel electrical permit to work</p>	<p>1. Only holder with high voltage category(ies); and</p> <p>2. Attended relevant course and switching attachment</p>

D. Courses and examinations

Course Name	Type	Minimum Course Duration	Course Entry Requirement	On the Job Training	Remarks
Chargeman L I & L3	Full time	9 Months	<ul style="list-style-type: none"> • Full Time Wireman First Grade Course; and • Holder of Certificate of Competency as a Wireman First Grade; or • Certificate in Engineering on Electrical <p>Note: Full time competency course duration shall be factored in as a relevant working experience.</p>	6 months to include L1 and L3 and to be verified by employer/competent person in EIU format logbook (At least 4 months on L1 and 1 month on L3)	<ul style="list-style-type: none"> • Pass examination on theory and practical parts; and • Upon completion, Certificate will be issued.
			Those without or limited work experience at time of enrolment.	2 weeks to be verified by employer/ competent person in EIU format logbook	<ul style="list-style-type: none"> • 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 LI	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 logbook	

Course Name	Type	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 logbook	<ul style="list-style-type: none"> • 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 L3	Part time	24 hours	Holder of Certificate of Competency as a Chargeman with L1 category	2 weeks to be verified by employer/ competent person in EIU format logbook	<ul style="list-style-type: none"> • Pass examination on theory and practical parts; and • Upon completion, Certificate will be issued.
			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 E IU format logbook	<ul style="list-style-type: none"> • Pass examination for theory and practical parts; and • If passed, candidate must acquire Chargeman LI prerequisite before certificate is issued.

Course Name	Type	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 style="list-style-type: none"> • Full Time Wireman First Grade Course at EIU accredited Institutions; or • Holder of Certificate of Competency as a Wireman First Grade; or • Certificate in Engineering on Electrical <p>Note: Full time competency course duration shall be factored in as a relevant working experience</p>	6 months to be verified by employer/ competent person in EIU format logbook (at least 2 months on L2 (O/H) and 2 months on L2 (U/G))	<ul style="list-style-type: none"> • Pass examination on theory and practical parts; and • Upon completion, Certificate will be issued.
			Those without or limited work experience at time of enrolment; and/or Without pre-requisite Chargeman L I	2 weeks to be verified by employer/ competent person in E IU format logbook.	<ul style="list-style-type: none"> • 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 logbook.	<ul style="list-style-type: none"> • Pass examination on theory and practical parts; and • Upon completion. Certificate will be issued.

Course Name	Type	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 enrollment; and/or Without pre-requisite Chargeman L1	2 weeks to be verified by employer/ competent person in EIU format logbook	<ul style="list-style-type: none"> • 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 (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 logbook	<ul style="list-style-type: none"> • Pass examination on theory and practical parts; and • Upon completion, Certificate will be issued.
			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 logbook	<ul style="list-style-type: none"> • 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.

Course Name	Type	Minimum Course Duration	Course Entry Requirement	On the Job Training	Remarks
Chargeman L4 (OGPV) L4 (GCPV) L4	Part time	32 hours	3 years working experience required to verified by employer / competent person on environment where electrical equipment is in operation & has experience of controlling live equipment.	Not Available	<ul style="list-style-type: none"> • Pass examination on theory and practical parts: and • Upon completion. Certificate will be issued.
Chargeman H1 up to 11KV	Part Time	2 month or 320 hours	<ul style="list-style-type: none"> • Holder of Certificate of Competency as a Chargeman L1 category • 1 year working experience required to verified by employer/competent person in an environment where high voltage electrical equipment is in operation & has experience of controlling live equipment. 	2 weeks to be verified by employer / competent person in EIU format logbook	<ul style="list-style-type: none"> • Pass examination on theory and practical parts: and • Upon completion, Certificate will be issued.
Chargeman H2(0/H) up to 11kV	Part time	32 hours	Holder of Certificate of Competency as a Chargeman L2(0/H) category	2 weeks to be verified by employer/ competent person in EIU format logbook	<ul style="list-style-type: none"> • Pass examination on theory and practical parts; and • Upon completion. Certificate will be issued.
			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 logbook	<ul style="list-style-type: none"> • Pass examination for theory and practical parts; and • If passed, candidate must acquire Chargeman L2 (O/H) pre-requisite before certificate is issued.

Course Name	Type	Minimum Course Duration	Course Entry Requirement	On the Job Training	Remarks
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 logbook.	<ul style="list-style-type: none"> • Pass examination on theory and practical parts; and • Upon completion. Certificate will be issued.
			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 logbook.	<ul style="list-style-type: none"> • Pass examination for theory and practical parts; and • If passed, candidate must acquire Chargeman L2 (U/G) pre-requisite before certificate is issued.
Chargeman H3 up to 11KV	Part Time	16 hours	<ul style="list-style-type: none"> • Holder of Certificate of Competency as a Chargeman L1 category • 1 year working experience required to verified by employer/competent person in an environment where high voltage electrical equipment is in operation & has experience of controlling live equipment. 	2 weeks to be verified by employer / competent person in EIU format logbook.	<ul style="list-style-type: none"> • Pass examination for theory and practical parts; and • If passed, candidate must acquire Chargeman H1 & L3 pre-requisite before certificate is issued.

E. Fees

No.	Type of Application	Annual Fee (RM)
1	Initial Registration	
	i Low Voltage	50
	ii Voltage Higher than Low Voltage	100
2	Renewal	
	i Low Voltage	50
	ii Voltage Higher than Low Voltage	100
3	Endorsement (i.e. upgrade)	50
4	Replacement (i.e. lost, retrieve)	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 (by assessment)	
	i Document Checklist for Submission (voltage higher than low voltage category)	5
	ii Photocopy 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 CAAC11	1
	iii Photocopy 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 (EIU)

11th Floor Wisma Satok,

Jalan Satok,

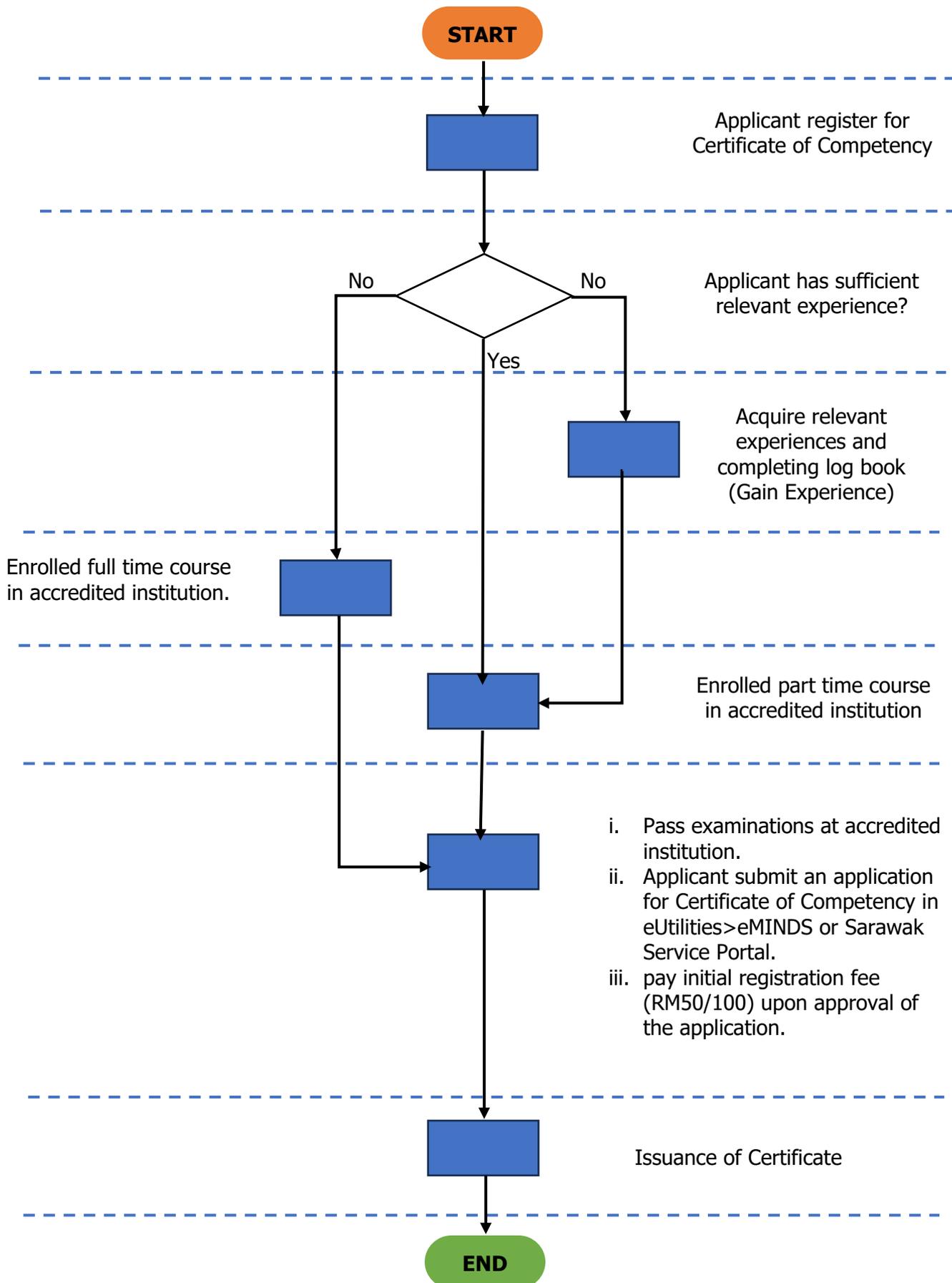
93400 Kuching, Sarawak

H. Preparation of Document

No.	Document
1	Recent testimonial of employment (if any)
2	Most recent valid First Aid certificate
	Certificate of recent relevant courses attended (if any)

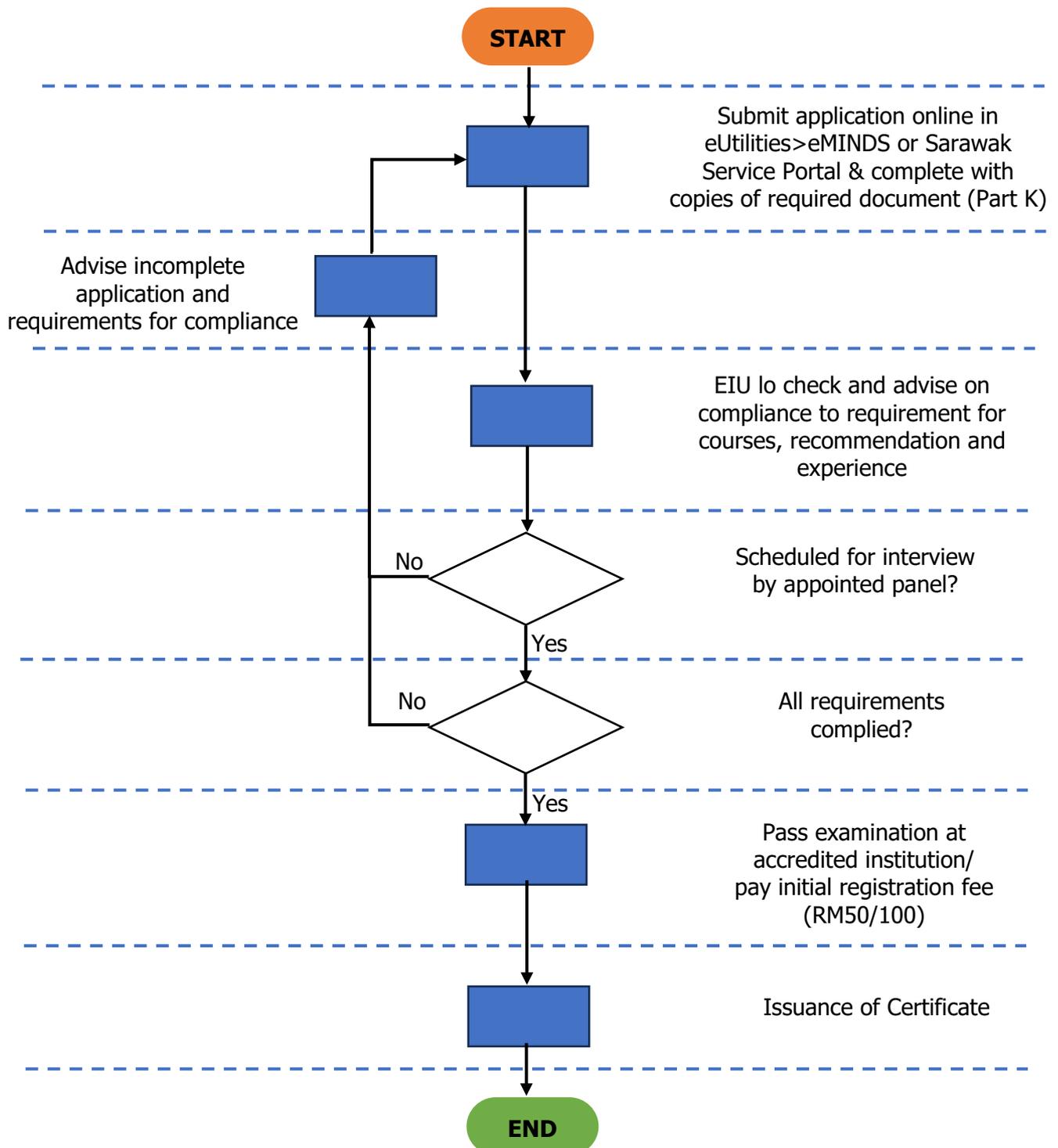
All documents in item (H) are to be uploaded in eMINDS (eUtilities System) or Sarawak Service Portal

I. Procedure for new application of Certificate of Competency as a Chargeman



J. Procedure for application of Certificate of Competency as a Chargeman for another category

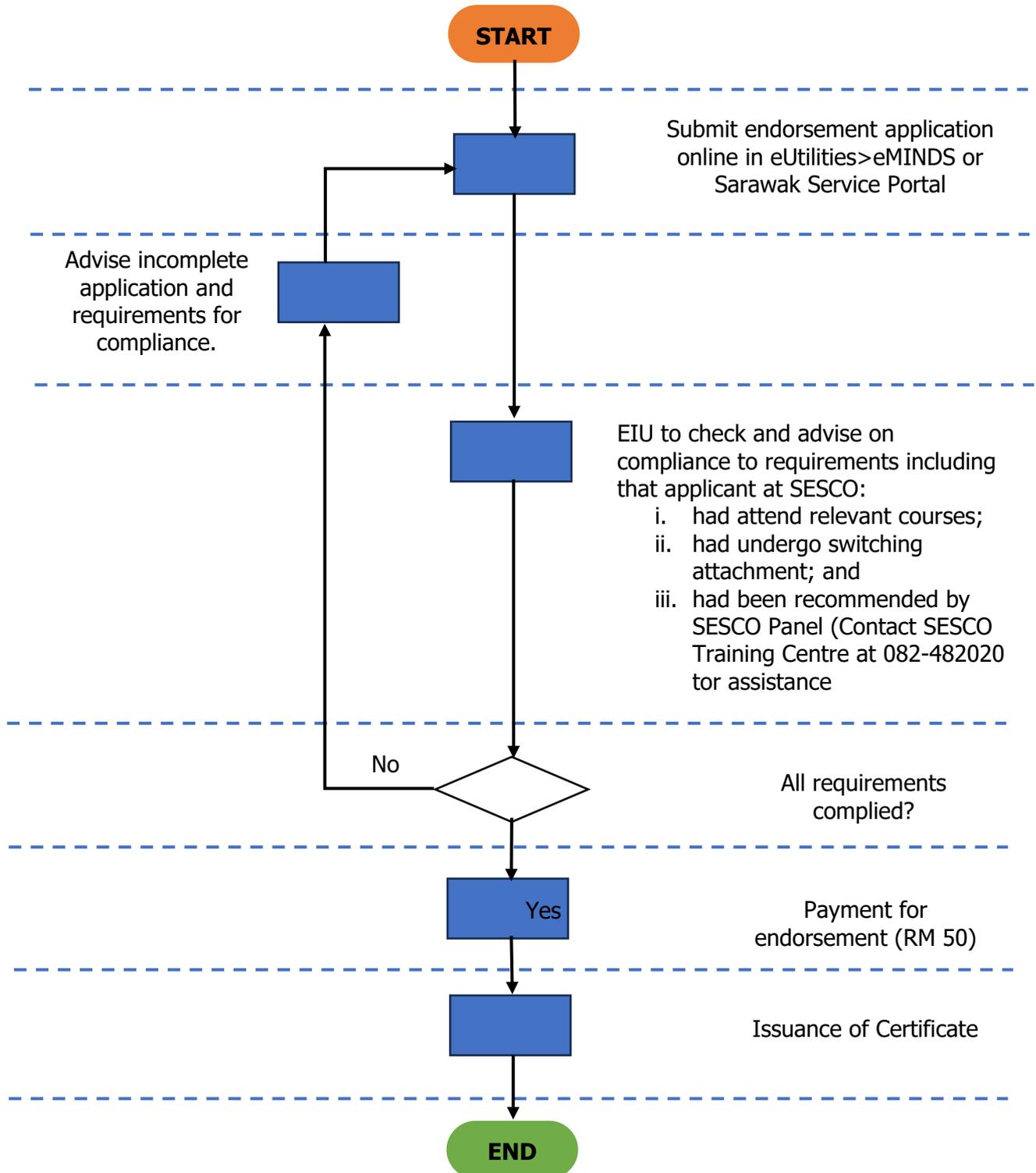
- i. voltage higher than low voltage
- ii. Restricted switching endorsement/category
- iii. Conversion of Certificate of Competency issued by Energy Commission



NOTE:

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

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



NOTE:

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

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

