STANDARD OPERATING PROCEDURE (SOP)

Process and Procedure for Conversion of Recognised Solar PV System Design Certificates to EIU Equivalent Certificate of Competency

1. PURPOSE

1.1 This SOP outlines the process and procedure for converting valid Solar PV System Design Certificate issued by recognized institutions (e.g., SEDA, or other training providers) into an Electrical Inspectorate Unit (EIU) Certificate. This process ensures that all certificate holders who wish to practice their competency in Sarawak comply with the requirements stipulated under the Sarawak Electricity Ordinance (Cap. 50) and the Electricity Rules, 1999.

2. SCOPE

2.1 This SOP applies to all applicants holding valid Solar PV System Design Certificates issued by recognized institutions who seek to obtain an equivalent EIU Certificate to practice in Sarawak. It covers the entire process, including application submission, examination, professional interview, endorsement, and final issuance of the EIU Certificate through the eUtilities system.

3. RESPONSIBILITIES

Role	Responsibility
Applicant	Submit all required documents, sit for examinations, attend professional interview, and complete online application and payment.
EIU Secretariat	Verify documents, schedule examinations and interviews, compile results, and facilitate endorsement by the Board of Examiners.
Board of Examiners	Review and endorse the results of examinations and interviews before certificate issuance.
Director of Electricity Supply	Approve final issuance of certificate via eUtilities system.

4. CONVERSION OF THE CERTIFICATE TO EIU EQUIVALENT CERTIFICATE OF COMPETENCY

4.1 The following table specifies the eligibility criteria for obtaining the EIU Certificates of Competency for solar PV systems design.

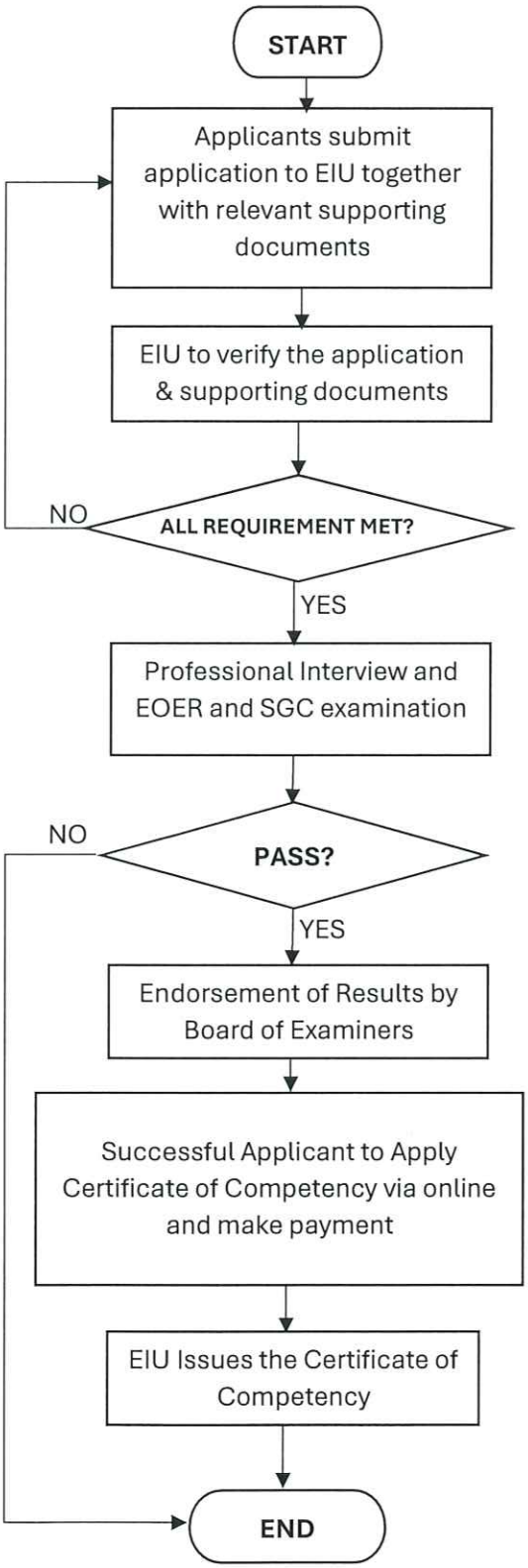
4.2 Applicants whose qualifications do not meet the requirements specified in the table below **shall be deemed ineligible** and **their applications will be rejected.**

4.3 The EIU reserves the sole discretion to determine and issue the appropriate category of Certificate of Competency, based on the results of the assessments and examinations.

EIU Equivalent Certificate of Competency	Other Requirements / Qualifications
Electrical Supervisor - Solar PV Design	1. Holds a valid Certificate for Solar PV System Design from a recognized institution. 1. Must be a Malaysian citizen. 2. Possess a minimum Diploma (or equivalent) in Electrical Engineering from a recognized institution. 3. Have not less than five (5) years of working experience in controlling live equipment. 4. Sufficient knowledge in modern electrical engineering practices, including the principles of operation of equipment used for generation, transmission, distribution, utilisation, protection and metering in electrical installation and energy efficiency.
Competent Electrical Engineer - Solar PV Design	1. Holds a valid Certificate for Solar PV System Design from a recognized institution. 2. Must be a Malaysian citizen. 3. Possess a minimum Degree (or equivalent) in Electrical Engineering from a recognized institution. 4. Hold a valid Certificate as a Competent Electrical Engineer issued by EIU. 5. Have not less than five (5) years of working experience in controlling live equipment. 6. Sufficient knowledge in modern electrical engineering practices, including the principles of operation of equipment used for generation, transmission, distribution, utilisation, protection and metering in electrical installation and energy efficiency.

5. APPLICATION PROCESS

5.1 The following outlines the process for applying for the conversion of a Certificate of Competency for holders of Solar PV System Design Certificates.



Supporting Documents Required:

1. Scanned Copy of Identity Card
2. Valid Solar PV System Design Certificate
3. Diploma / Degree or Education Certificate that equivalent to Diploma / Degree in Electrical Engineering
4. Valid Certificate as a Professional Engineer (for CEE)
5. Working Testimonials / Logbook that has been endorsed by a Competent Person / Supervisor

EIU to notify the status of application

- EIU will arrange the interview and the EOER and SGC examinations for applicants who have not obtained it.
- The assessment fee shall be paid before the interview or examination date.

EIU to notify the status of the assessment

- EIU will notify the applicant once the results have been endorsed by the Board of Examiners (BOE)

- Online application platform:

1. eUtilities System https://eutilities.sarawak.gov.my
2. Service Sarawak https://service.sarawak.gov.my

- The applicant prints their own the digital Certificate of Competency.

6. RECOGNISED SOLAR PV DESIGN CERTIFICATE

6.1 EIU recognises Solar PV Design Certificates issued by institutions accredited or acknowledged by relevant authorities in Malaysia. Certificates from other institutions may also be considered, provided they are evaluated and deemed equivalent in scope, technical content, and competency standards set by EIU.

7. APPLICATION FORM

7.1 The application form for the conversion of Solar PV Design Certificates is provided in Appendix A. The completed form shall be submitted to the following address:

Director of Electricity Supply
ELECTRICAL INSPECTORATE UNIT (EIU),
Ministry of Utility and Telecommunication, Sarawak,
Level 8, LCDA Tower,
Lot 2879 The Isthmus, Off Jalan Bako
93050 Kuching,
SARAWAK

8. DECLARATION

8.1 EIU reserves the right to amend, update, or revoke this SOP at any time without prior notice. All decisions made by EIU with respect to this procedure shall be final and binding.

9. EFFECTIVE DATE

9.1 This procedure takes effect on the date it is signed by the Director of Electricity Supply and will remain in force until revised or revoked by EIU.

.....
DIRECTOR OF ELECTRICITY SUPPLY

DATE: 1/10/2025

Ref. No:

Appendix A : Application Form for the Assessment of Conversion Certificate

Your Name *(in Capital Letters)*	Click or tap here to enter text.
Mailing Address	Click or tap here to enter text.
Contact No.(H/P)	Click or tap here to enter text.

Director of Electricity Supply
ELECTRICAL INSPECTORATE UNIT (EIU),
Ministry of Utility and Telecommunication, Sarawak,
Level 8, LCDA Tower, Lot 2879 The Isthmus, Off Jalan Bako
93050 Kuching, SARAWAK

Sir,

Submission of Report for:

SYSTEM	
☐	GCPV
☐	OGPV
☐	GCPV & OGPV

CERTIFICATE OF COMPETENCY	
☐	Certificate of Competency as a **Competent Electrical Engineer** for Solar PV Design
☐	Certificate of Competency as an **Electrical Supervisor** Solar PV Design

(Tick which is applicable)

Please find attached **5 copies** of the following documents:

☐	Photocopy of Identity Card (IC)
☐	Relevant Diploma or Degree Certificate
☐	Valid Professional Engineer registration with Board of Engineers Malaysia
☐	Testimonial of Employment / Logbook
☐	Technical Report
☐	Solar PV Design course attendance Certificate
☐	Solar PV Design Certificate by recognised institution

I look forward to your favourable response and will be available when called for interview with BOE appointed panel as per advised by your office.

Thank you.

_____

(signature)
Name: Click or tap here to enter text.

REPORT SUBMISSION GUIDELINE FOR CERTIFICATE OF COMPETENCY AS ELECTRICAL SUPERVISOR / COMPETENT ELECTRICAL ENGINEER

PANDUAN MENGEMUKAKAN LAPORAN BAGI SIJIL KEKOMPETENAN SEBAGAI PENYELIA ELEKTRIK KOMPETEN / JURUTERA ELEKTRIK KOMPETEN

Categories of work

Jenis Kategori Kerja:

Please specify the category(ies) of works you intend to apply for and the associated voltage level.
Sila nyatakan kategori kerjasekatan voltan yang berkaitan.

A. Overhead lines (415 V, Up to 11 kV, Up to 33 kV, Up to 132 kV, Up to 275 kV)
Talian Atas (415 V, Sekatan melebihi 11 kV, Sekatan melebihi 33 kV, Sekatan melebihi 132 kV, Sekatan melebihi 275 kV)

B. Underground cables(415 V, Up to 11 kV, Up to 33 kV, Up to 132 kV, Up to 275 kV)
Kabel Bawah Tanah(415 V, Sekatan melebihi 11 kV, Sekatan melebihi 33 kV, Sekatan melebihi 132 kV, Sekatan melebihi 275 kV)

C. Electrical substations including transformer stations and all associated electrical auxiliaries. (415 V, Up to 11 kV, Up to 33 kV, Up to 132 kV, Up to 275 kV)
Pencawang Elektrik termasuk stesen transformer dan semua auxilari elektrik yang berkaitan(415 V, Sekatan melebihi 11 kV, Sekatan melebihi 33 kV, Sekatan melebihi 132 kV, Sekatan melebihi 275 kV)

D. LV installation and equipment(415V) where a main switchboard is not required. However, this may include control and communication systems used in consumer premise, the public supply licensee or other licensees power systems
Pepasangan dan Peralatan LV (415V) di mana papan suis utama tidak diperlukan. Walau bagaimanapun, ini termasuk kawalan dan sistem komunikasi yang digunakan di premis pengguna, pemegang lesen bekalan awam atau pemegang lesen sistem kuasa yang lain.

Types of activities:

Jenis-jenis Aktiviti:

1. The report should include a list of work experience in the category applied.
Laporan itu hendaklah termasuk senarai pengalaman kerja dalam kategori yang dipohon.

2. The applicant shall describe in detail the work experience. The descriptions shall focus on activities which had been carried out. In order to assist in the writing of the report, below are the typical engineering projects or works that can be undertaken and demonstrated in an engineering activity. Any other unique characteristics would be useful.
Pemohon hendaklah menerangkan pengalaman kerja secara terperinci. Penerangan hendaklah memberi tumpuan kepada aktiviti-aktiviti yang telah dijalankan. Bagi membantu dalam penulisan laporan itu, di bawah ialah projek-projek kejuruteraan atau kerja-kerja yang boleh biasa dijalankan dan ditunjukkan dalam aktiviti kejuruteraan. Apa-apa ciri-ciri unik yang lain adalah dialu-alukan.

3. The report must highlight on the safety aspects and safety measures taken in undertaking the works.
Laporan itu mesti menekankan kepada aspek keselamatan dan cara-cara keselamatan dalam menjalankan kerja-kerja.

PLANNING

PERANCANGAN

1. Perform data collection, engineering investigations, system modelling, simulation studies, technical calculations, engineering analysis, system integration and engineering, calculation of basic design parameters for system and equipment
Melaksanakan pengumpulan data, siasatan kejuruteraan, pemodelan sistem, kajian simulasi, pengiraan teknikal, analisis kejuruteraan, integrasi sistem dan kejuruteraan, pengiraan parameter reka bentuk asas untuk sistem dan peralatan

2. Perform calculation and costing
Melaksanakan pengiraan dan tafsiran kos

DESIGN AND CONSTRUCTION
REKABENTUK DAN PEMBINAAN

1. Perform design calculations, writing of technical specifications and technical evaluations
   Melaksanakan pengiraan, penulisan spefikasi teknikal dan penilaian teknikal

2. Involve in the use of construction related software, cable schedules, factory acceptance tests, site activities and supervision and safety compliance programs
   Terlibat dalam penggunaan perisian yang berkaitan dengan pembinaan, jadual kabel, ujian terhadap kilang, tapak aktiviti dan penyeliaan keselamatan dan program pematuhan

3. Prepare schematic drawings, shop drawing etc.
   Menyediakan lukisan skematik, lukisan kedai dan lain-lain

4. Perform equipment testing, equipment calibration, system commissioning etc.
   Menjalankan ujian terhadap peralatan, penentukuran peralatan, sistem pentauliahan dan lain-lain

5. Additional attributes include perform construction site management, quality assurance programs, project budgeting and cost control
   Sifat-sifat tambahan termasuk melaksanakan pengurusan tapak pembinaan, program jaminan kualiti, belanjawan projek dan kawalan kos.

OPERATION AND CONTROL
OPERASI DAN KAWALAN

1. Real time system control and generator control (PF and QV)
   Sistem kawalan "Real time" dan kawalan penjana (PF dan QV)

2. Switching operation of equipment
   Operasi pensuisan pada peralatan

3. Operation of switchgears and transformers in situ or remote
   Operasi suis gear dan transformer di tempat tetap atau jauh

4. System and security performance evaluation and contingency planning
   Sistem dan penilaian prestasi keselamatan dan perancangan luar jangka

5. Planning and evaluation of system shutdown or restoration
   Perancangan dan penilaian ke atas "shut down" sistem atau pemulihan

REPAIR AND MAINTENANCE
PEMBAIKAN DAN PENYELENGGARAAN

1. System fault location and incident investigations
   Mengesan lokasi kecacatan sistem dan siasatan kejadian

2. Equipment inspection and troubleshooting
   Pemeriksaan dan mengesan punca masalah peralatan

3. Defect identification and replacement of parts, alteration of installation
   Mengenalpasti kecacatan dan penggantian peralatan, pindaan perpasangan

4. Maintenance planning and programming and/or its implementation
   Rancangan penyelenggaraan dan/atau pelaksanaan

5. Management of technical equipment performance management
   Pengurusan prestasi peralatan teknikal

ELECTRICAL WORK EXPERIENCE LOG SHEET

Name	Click or tap here to enter text.		
I.C No.	Click or tap here to enter text.		
Date	Detail Descriptions of Work / Activities / Projects	Supervisor	
		Name (include Competency or PE No.)	Signature
From Click or tap to enter a date. **To** Click or tap to enter a date.	Click or tap here to enter text.	Click or tap here to enter text.	
From Click or tap to enter a date. **To** Click or tap to enter a date.	Click or tap here to enter text.	Click or tap here to enter text.	
From Click or tap to enter a date. **To** Click or tap to enter a date.	Click or tap here to enter text.	Click or tap here to enter text.	
From Click or tap to enter a date. **To** Click or tap to enter a date.	Click or tap here to enter text.	Click or tap here to enter text.	