

Competency Requirement for Sarawak Energy's Tenders
(SESCO-Distribution/ Project Delivery / Rural Electrification Scheme)

Contract	UPK Requirement	CAC Competency Requirements
Annual Contract – Construction (SESCO – Distribution)		
Tender for Underground / Aerial Cable Jointing	<u>11kV</u> Electrical Head VIIB, Class III or above sub-heads; • 1c (for Cable Jointing up to 11kV) or above <u>33kV</u> Electrical Head VIIB, Class II or above sub-heads; • 1b (for Cable Jointing up to 33kV) or above	HV cable jointing up to 11kV (up to 33kV, if applicable)
Tender for the Installation of HT & LT Overhead Lines, Aerial Cables & Service Lines	Electrical Head VIIB, Class III or above sub-heads; • 2b (for Overhead Lines works up to 33kV) or above; and • 5c (for Aerial Cables Installation up to 11kV) or above	1) Overhead Line up to 33kV 2) Valid Contractor Pass
Tender for the Installation and Dismantling of Substation Equipment	Electrical Head VIIB, Class II or above sub-heads; • 2b (for Overhead Lines works up to 33kV) or above; or • 4b (for Switchgear and Substation up to 33kV) or above	1) Substation Equipment up to 33kV, or Overhead Line up to 33kV, or HV Cable Jointing 2) Valid Contractor Pass
Tender for Supply, Delivery & Installation of Overhead Service Lines	Electrical Head VIIB, Class IV or above sub-heads; • 2d (for Overhead Line up to 415V) or above	1) Overhead Line up to 1kV 2) Valid Contractor Pass
Tender for Supply, Delivery & Installation of Underground Service Cables	Electrical Head VIIB, Class IV or above sub-heads; • 3d (for Underground Cabling works up to 415V) or above	1) Underground Cable Laying up to 1kV 2) Valid Contractor Pass
Tender for Underground Cable Laying and Street Lighting Column Erection	Electrical Head VIIB, Class II or above sub-heads; • 3b (for Underground Cabling works up to 33kV) or above	1) Underground Cable Laying up to 33kV 2) Valid Contractor Pass

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Tender for the Construction of Outdoor Substation Civil Works	UPK under works Head 1 subheads: • 1 (General Civil Engineering Works Including Piling)	Nil (for new substation)
Tender for Installation and Maintenance of HT and LT Overhead Lines, Service Lines and Aerial Cables	Electrical Head VIIB, Class III or above sub-heads; • 2b (for Overhead Lines works up to 33kV) or above; and • 5c (for Aerial Cables Installation up to 11kV) or above	1) HV OH lines up to 11kV or 33kV 2) LV OH lines
Annual Contract - Maintenance (SESCO – Distribution)		
Tender for Major Substations Routine Maintenance	Electrical Head VIIB, Class II or above sub-heads; • 2b (for Overhead Lines works up to 33kV) or above; or • 4b (for Switchgear and Substation up to 33kV) or above	Valid L1 competency certificates issued by Electrical Inspectorate Unit (EIU)
Tender for Minor Substations Routine Maintenance	Electrical Head VIIB, Class II or above sub-heads; • 2b (for Overhead Lines works up to 33kV) or above; or • 4b (for Switchgear and Substation up to 33kV) or above	1) Safety Awareness for Working Near to Electrical Installation 2) Low Voltage Substation Equipment up to 1kV or Low Voltage Overhead Lines up to 1kV
Tender for Overhead Line Vegetation Clearing and Substation Grass Cutting	Electrical Head VIIB, Class II or above sub-heads; • 2b (for Overhead Lines works up to 33kV) or above; or • 7b (for Vegetation Clearing works up to 33kV) or above	Non-technical competency
Tender for HT/LT Overhead Lines Maintenance and Bonding Works	Electrical Head VIIB, Class III or above sub-heads; • 2b (for Overhead Lines works up to 33kV) or above; and • 5c (for Aerial Cables Installation up to 11kV) or above	1) HV OH lines up to 11 or 33kV 2) LV OH lines
Tender for Supply of Manpower for Overhead Line Pole Base Inspection	UPK Head VI, Sub-head; • 5a (Landscaping Works i) Construction ii) Maintenance)	Nil
Tender for 24 Hours Standby Services	Electrical Head VIIB, Class III or above sub-heads; • 2b (for Overhead Lines works up to 33kV) or above; and	1) HV OH lines up 11kV or 33kV, and 2) LV OH lines, and 3) LV Switching

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	<ul style="list-style-type: none"> • 5c (for Aerial Cables Installation up to 11kV) or above 	
Tender for Street Lighting Maintenance	Electrical Head VIIB, Class IV or above sub-heads; <ul style="list-style-type: none"> • 2d (for Overhead Line up to 415V) or above 	LV OH lines up to 1kV
Tender for Substation Routine Maintenance	Electrical Head VIIB, Class II or above sub-heads; <ul style="list-style-type: none"> • 2b (for Overhead Lines works up to 33kV) or above; or • 4b (for Switchgear and Substation up to 33kV) or above 	Non-technical competency
Tender for Overhead Line Vegetation Clearing	Electrical Head VIIB, Class II or above sub-heads; <ul style="list-style-type: none"> • 2b (for Overhead Lines works up to 33kV) or above; or • 7b (for Vegetation Clearing works up to 33kV) or above 	Non-technical competency
Major Project (Zone substation)- (SESCO – Distribution)		
Civil and Building Works Tender	a) Works - Class BX or above heads and subheads:- <ul style="list-style-type: none"> - Head I, Subhead 1 (General Civil Engineering Works including Piling); and - Head II, Subhead 2a (Reinforced Concrete Framed Buildings) b) CIDB Registered Contractor Grade 4 or above with the following category:- <ul style="list-style-type: none"> - Category CE, CE21 (General Civil Engineering Work); and - Category B, B04 (General Buildings and Maintenance. 	Valid CIDB Green Card
Electrical Works Tender	a) Unit Pendaftaran Kontraktor (UPK) Electrical Works Class II or above, Head VIIB under the following subheads:- <ul style="list-style-type: none"> - Subhead 4a (Switchgear & Substation No Limit) or - Subhead 4b (Switchgear & Substation up to 33kV) 	<u>Site Supervisor</u> Substation Equipment up to 33kV <u>Commissioning Engineer</u> 1) HV Equipment Testing 2) Protection, Control, and Instrumentation Works <u>Testing Engineer</u> 1) HV Equipment Testing

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	b) CIDB Grade 4 or above Category ME, E04 (Low Voltage Installation) & E05 (High Voltage Installation)	2) Protection, Control, and Instrumentation Works <u>Jointer</u> HV Cable Jointing (Heatshrink and Taping) up to 33kV <u>DC System Commissioning</u> HV Equipment Testing and Protection, Control, and Instrumentation Works
Mega Projects (Transmission) – (Project Delivery)		
<u>Non-Bumi Contract</u> The typical eligibility requirements for 275/132/33kV Substation	Civil counterparts must be UPK Registered Contractor of Class A, Head I & II , and Registered with CIDB of Grade 7, category CE and B, and Must have past project experience for 275kV and 132kV Substation with Sarawak Energy	<u>For 275 or 132kV substation</u> <u>Commissioning Engineer</u> HV equipment testing up to 275 or 132kV or Higher voltage level <u>Testing Engineer</u> HV equipment testing up to 275 or 132kV or Higher voltage level <u>Site Supervisor</u> Substation equipment testing up to 275 or 132kV or Higher voltage level <u>For 33kV substation</u> <u>Commissioning Engineer</u> HV equipment testing up to 33kV or Higher voltage level <u>Testing Engineer</u> HV equipment testing up to 33kV or Higher voltage level
<u>Bumi Contract</u> The typical eligibility requirements for 132/33kV Substation	Civil counterparts must be UPK Registered Contractor of Class A, Head I & II with Bumiputera status, and Registered with CIDB of Grade 7, category CE and B	<u>Site Supervisor</u> Substation equipment testing up to 33kV or Higher voltage level <u>Jointer</u> HV Cable Jointing (Heatshrink and Taping) up to 33kV or higher voltage level For works carried out in a 'Live' Substation environment, it is

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		<p>mandatory to provide the following personnel at all times at site:</p> <p>(a) For electrical works for 275kV substation, a competent person with H1 competency up to 275kV with valid CAC certificate</p> <p>(b) For electrical works for 33kV substation, a competent person with H1 competency up to 33kV with valid CAC certificate</p> <p>(c) For civil works; supervisor must have non-technical competency certificate issued by CAC</p>
Rural Electrification Scheme – (RES)		
MVCC line	Electrical Head VIIB, Class II or above, sub-heads; <ul style="list-style-type: none"> • 2b (for Overhead Lines works up to 33kV) or above; • 3b (for Underground Cable Installation up to 33kV) or above; and • 5b (for Aerial Cables Installation up to 33kV) or above 	Overhead Line up to 33kV or EIU Chargeman - Overhead Line up to 33kV
RES Last Miles	Electrical Head VIIB, Class II or above, sub-heads; <ul style="list-style-type: none"> • 2b (for Overhead Lines works up to 33kV) or above; • 3b (for Underground Cable Installation up to 33kV) or above; and • 5b (for Aerial Cables Installation up to 33kV) or above For 11kv: as above but Class III, 2c, 3c, 5c	Overhead Line up to 33kV or EIU Chargeman - Overhead Line up to 33kV For 11kv: up to 11kv
SARES Solar	UPKJ Class I, Head VIIA, Sub-Head 1 (Building Electrical Works)	1) ISPQ/SEDA Certificate in (OGPV) 2) Wireman G1 and G2 3) Chargeman L2 4) Authorised to Test (ATT)
AWS Internal House Wiring	n/a	EIC with valid ATT certificate
Rural School Electrification	UPK Registered under Electrical Works Contractor Class I or below, Head VIIA, Sub-Head 1	a) Certified Electrical Installation Contractor (EIC) with valid Authorized-To-Test (ATT).

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		b) Competent person with L2(O/H) competency with valid CAC certificate.
LJK (Lampu Jalan Kampung) installation	UPK Registered under Electrical Works Contractor under Class IV or above, Head VIIB, Sub-Head 2D or above.	a) Competent person with L2 (O/H) with valid CAC certificate.