

#### INSTRUCTIONS FOR COMPANIES

The Department of Electrical Services will be updating the list of approved products / manufacturers further. Therefore, we would like to invite prospective companies to became agents for products which currently have no appointment agents by reapplying their products as per the normal procedures. Products that has no appointed agents and did not reregister after 1st August 2021 will be removed from the list.

#### 1.0 POWER CABLES AND ACCESSORIES

#### 1.1 33KV / 66KV HIGH VOLTAGE ( XLPE LEAD SHEATH)

NO.	MANUFACTURER	COUNTRY of ORIGIN	BRAND, MODEL & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT (APPOINTMENT VALIDITY)	DATE of APPROVAL / REGISTRATION
1.1.1	Federal Powers	(Malaysia)	33KV & 66KV XLPE Underground Cables			
1.1.2	LG Tek	(Korea)				
1.1.3	Phelps Dodge	(Thailand)	H.T. Power Cable			
1.1.4	Pirelli	(Italy / U.K)				
1.1.5	Taihan Cable Vina Co. Ltd (previously Taihan Sacom Company)	(Korea)	4C/300mm₂ XLPE/LSF CABLE 1C/25mm₂ XLPE/LSF CABLE 5C/4mm₂ XLPE/LSF CABLE			
1.1.6	Taihan Cable Vina Co. Ltd (previously Taihan Sacom Company)	(Korea)	8.7/15KV XLPE POWER CABLE (Up to 300SQMM)		L.K.H (B) SDN BHD (30 JUNE 2014)	27 October 2016 19 August 2014
1.1.7	LS-Vina	(Vietnam)	High Voltage Cables Up to 170KV (UP to conductor size 1000sqmm)			
1.1.8	Suedkabel GMBH	(Germany)	66KV XLPE/Lead Sheathed Cable			
1.1.9	РСМ	(Malaysia)	33KV & 66KV High Voltage Cables			
1.1.10	Daewon	(Korea)	11KV XLPE LS Cable (Up to 300mm²/3C)			10 August 2017
1.1.11	Ningbo Orient Wires	(China)	1C/630mm <sup>2</sup> 66KV Underground Cables		FRASER INTEL SOLUTIONS SDN BHD	4 April 2020
1.1.12	TBEA Shandong Luneng Taishan Cable Co., Ltd	(China)	TBEA 66KV Underground Cable 1. CU/XLPE/CAS/HDPE 2. CU/XLPE/LS/HDPE		SIVLI SDN BHD	1 March 2021



### 1.2 11KV MEDIUM VOLTAGE UNDERGROUND CABLE (XLPE LEAD SHEATHED)

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
1.2.1	Federal Powers	(Malaysia)	1) 11KV XLPE Underground Cables			
1.2.2	LG Tek	(Korea)				
1.2.3	Phelps Dodge	(Thailand)	11KV XLPE Underground Cables & 600 / 1000V Low Voltage Cables			
1.2.4	Pirelli	(Italy/U.K)				
1.2.5	Taihan Cable Vina Co. Ltd.	(Korea, Vietnam)	1) 95 SQ.MM/3C XLPE/LD/DSTA PVC CABLES 2) 185SQ.MM/3C XLPE/LD/DSTA/PVC CABLE 3) 300 SQ.MM 3C XLPE/LD/DSTA/PVC CABLE 8.7/15kV XLPE Power Cable up to 3Cx300mm2		L.K.H (B) SDN BHD (30 JUNE 2014)	
1.2.6	РСМ	(Malaysia)	11KV XLPE Medium Voltage Cables			
1.2.7	Prysmian ,	(Italy)	AIRBAG CABLE 6.35/11KV (3C 95 SQMM HEPR/AIRBAG) 6.35/11KV (3C 185 SQMM HEPR/AIRBAG & 6.35/11KV (3C 300SQMM HEPR/AIRBAG)			
1.2.8	Prysmian	(Indonesia)	6350/11000v, 95mm <sub>2</sub> - 300mm <sub>2</sub> , 3C/CU/HEPR/Polymeric Protection/PE-AIRBAG CABLE METER			v
1.2.7	Leader Cable	(Malaysia)	11KV XLPE Lead Sheathed Underground Cable (Up to 300mm²)		CORIS TRADING CO. LEADER CABLE	6 December 2012 7 June 2017
1.2.8	PT.Prysmian	(Indonesia)	11kV 3X95, 3X185,3X300 & 1X630mm Cu/XLPE/LS/DSTA/PVC Medium Voltage Lead Sheath Cable	Include 3 years warranty	JYL LLEVEIRA ENTERPRISE	16 April 2018





### 1.3 LOW VOLTAGE AERIAL BUNDLE CONDUCTOR

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
1.3.1	Iljin Cables	(Korea)	1. 600/1000V XLPE CABLES			
1.3.2	Kaiser	(Germany)	1. LV CABLES (XLPE/PVC INSULATION			
1.3.3	L.K.H	(Brunei)	1. <u>XLPE INSULATED ARMOURED CABLE</u> 2C (16, 25, 35) mm sq. 4C (16,25,35,70,95,120,185,240)mm sq. 1C (400,500,630) mm sq.  2. <u>PVC INSULATED ARMOURED CABLE</u> 2C (16,25,35)mm sq. 4C (16,25,35)mm sq.		L.K.H (B) SDN BHD	11 April 1998
1.3.3	LK.H ,	(Brunei)	A) XLPE INSULATED ARMOURED CABLE 2C 50mm sq 4C 50mm sq  B) PVC INSULATED ARMOURED CABLE 2C (1.5,2.5,4,6,10) mm sq. 4C (1.5,2.5,4,6,10) mm sq.		L.K.H (B) SDN BHD	17 August 1998
1.3.4	Leader Cable Industry Berhad	(Malaysia)	ABC Cable (Up to 185mm²/4C + 25mm²) 300 MCM Triplex 11KV Aerial Bundle Aluminium Conductor LOW VOLTAGE CABLE CU/XLPE/SWA/PVC Cable (Up to 4C x 240mm²) & XLPE/PVC/AWA/PVC (1C x 500mm²)			13 June 2017
1.3.5	Sigma	(Singapore)				
1.3.6	DRAKA SCM (Singapore Cable SCM)	(Singapore)	XLPE / SWA / PVC AND PVC / SWA / PVC CABLES LOW VOLTAGE AERIAL BUNDLE CONDUCTOR			



			REVISION 12111 JUNE 2021			
1.3.7	Universal	(Malaysia)	(A) XLPE POWER CABLE (Up to 11KV) PILOT CABLE, FIRE RESISTANT CABLE, INSTRUMENT CABLE & CONTROL CABLE			
1.3.8	Baosheng Science & Technology Innovation Co., Ltd	(China)	LOW VOLTAGE CABLE, CU/XLPE/SWA/PVC Cable (Up tp 4C x 240mm²) & XLPE/PVC/AWA/PVC (1C x 500mm²)			7 June 2017
1.3.9	Daewon Cable Co. Ltd	(Korea)	XLPE/SWA/PVC and PVC/SWA/PVC Low Voltage and Pilot Cables			21 October 2019
1.3.10	Olympic Cable	(Malaysia)	Cu/XLPE/SWA/PVC (up to 240mm²) / 4C LV Cables		AST ENTERPRISE	25 March 2020
1.3.11	Wuhan Sunni Electric Wire & Cable	(China)	Low Voltage Aerial Bundle Conductor - 4C/25 sqmm, 4C/35 sqmm, 4C/120 sqmm + 25 sqmm		SYARIKAT PERUSAHAAN ZAIBA & ADIK - ADIK	14 December 2020
1.3.12	Wuhan Sunni Electric Wire & Cable	(China)	Low Voltage Aerial Bundle Conductor - 4C/185 sqmm + 25 sqmm		SYARIKAT PERUSAHAAN ZAIBA & ADIK - ADIK	1 March 2021
1.3.13	Wuhan Sunni Electric Wire & Cable	(China)	Triplex Self Supporting Aerial Cables with Galvanized Steel Messenger Wire: 11KV 300MCM/3 Core	2	SYARIKAT PERUSAHAAN ZAIBA & ADIK - ADIK	14 December 2020
1.3.14	Wuhan Sunni Electric Wire & Cable	(China)	Triplex Self Supporting Aerial Cables with Galvanized Steel		SYARIKAT PERUSAHAAN ZAIBA & ADIK - ADIK	1 March 2021
1.3.15	Sigma Cable Company Pte Ltd	(Singapore)	Sigma Fire Resistant Cable XSL-FR-600M SIGMA Fire Resistant Cables Size 2C x 1.5 mm2 to 4C x 400 mm2 XL-FR-600M SIGMA Fire Resistant Cables Size 2C x 1.5 mm2 to 4C x 400 mm2 XL-FR-600S SIGMA Fire Resistant Cables Size 1C x 2.5 mm2 to 1C x 630 mm2		FUNCTIONAL ENGINEERING SDN BHD	1 March 2021



#### DEPARTMENT OF ELECTRICAL SERVICES, MINISTRY OF ENERGY

### GENERAL LISTS OF APPROVED PRODUCTS / MANUFACTURERS FOR MECHANICAL AND ELECTRICAL INSTALLATIONS REVISION 12TH JUNE 2021

#### 1.4 MEDIUM / LOW VOLTAGE

i) TERMINATION & 66KV CABLE SEALING END KITS (INDOOR /OUTDOOR)

ii) JOINTING KITS (LOW VOLTAGE- 11KV / 66KV)

(i) (ii) - PURPLE COLOUR (SAME DESCIPTION)

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
1.4.1	3M	(U.S.A)				
1.4.2	Cellpack	(Switzerland / Germany)				
1.4.3	Kabeldon	(Sweden)			8	
1.4.4	Pirelli	(U.K)		Ø		
1.4.5	RAYCHEM					
1.4.6	REPL 6	(India)	1. 11KV Heat Shrinkable 3 Core Cable Termination (Indoor / Outdoor)			
1.4.7	REPL	(Malaysia)	Heat Shrinkable Cable Termination & Accessories (Outdoor / Indoor Termination for Voltage Level 11KV -     33KV)			
1.4.8	Sigmafom	(U.K)				
1.4.9	Sucofit	(Switzerland)	Non -Tracking Outdoor Tubing / Heat - Shrinkable 11KV			
1.4.10	Suedkabel GMBH	(Germany)	1. 66KV XLPE/Lead Sheathed Cable 2. 66KV XLPE/ Cable Accessories i) Outdoor / GIS Termination ii) Normal / Insulated Joints / Cable Accessories: i) Outdoor / GIS Termination., ii) Normal / Insulated Joints			
1.4.11	Nexans Italia SPA	(Italy)	1) Medium / Low Voltage , Termination & Jointing Kits		Rennah Services Sdn Bhd	27 April 2017



#### 1.5 EARTHING GRID SYSTEMS

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
1.5.1	Cadweld	(U.K)				
1.5.2	Furse	(U.K)				
1.5.3	Heng	(Singapore)				
1.5.4	Unitech	(Singapore)	Copper Earth Rod, Corrosion Resistance, Copper Alloy Coupling, Special AB Clamp, BI-Metal Connector, Pure Copper Connector, Pure Aluminium Connector, High Strength Corrosion Resistance Copper Alloy Clamp.			
1.5.5	Wellflex (Earth Pit)	(U.K)				

#### 1.6 BARE ALUMINUM CONDUCTORS

NO	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
1.6.1	Leader	(Malaysia)				
1.6.2	LG Tek	(Korea)				
1.6.3	Wuhan Sunni Electric Wire & Cable	(China)	ACSR Product Bare Conductor (AAAC & ACSR)		SYARIKAT PERUSAHAAN ZAIBA & ADIK - ADIK	1 March 2021

#### 1.7 INSULATORS

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
1.7.1	NGK	(Japan, China)				
1.7.2	Dalian	(China)				

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### 1.8 SURGE ARRESTOR (LOW VOLTAGE / HIGH VOLTAGE)

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
1.8.1	Toshiba	(Japan)	Surge Arrestor - RVLQC-75PLVY3	2		
1.8.2	АВВ	(Sweden)	72.5KV			

#### 1.9 CABLE ACCESSORIES

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
1.9.1	TBEA Shandong Luoneng Taishan Cable Co., Ltd	(China)	Outdoor Termination with Porcelain Insulator for Polymeric Extruded Power Cable; Dry Type Cable Connection (L=491mm) for Transformer for Polymeric Extruded Power Cable; Dry Type Cable Connection (L=583mm) for Gas-Insulated Metal-Enclosed Switchgear for Polymeric Extruded Power Cable; Joint with Screen Interruption for Polymeric Extruded Power Cable		SIVLI SDN BHD	06 April 2021
1.9.2	Yongjiou Electirc Power Fitting Co. Ltd	(China)	Suspension Clamp Aerial Bundle Conductor (ABC) Dead End Clamp LV Series Insulator Piercing Connector (IPC or Line Tap) for Bare Conductor or ABC		DSC ENGINEERING COMPANY SDN BHD	06 April 2021



#### 2.0 SWITCHGEARS

### 2.1 MEDIUM VOLTAGE METALCLAD SWITCHGEARS (11KV TO 33KV)

	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
2.1.1	Schneider Electric	(France /U.K)	Genie Evo <u>11KV</u> Metalclad Switchgear			
2.1.2	Schneider Electric	(Indonesia)	MC Set (INDONESIA) Model AD2			
2.1.3	Toshiba	(Malaysia)	HV12			
2.1.4	Siemens	(Germany)	11kV Medium Voltage Metalclad Switchgear Panel NXPLUS C		INFRED ELECTRICAL & TRADING COMPANY	03 May 2017
2.1.5	Siemens	(China)	11kV Medium Voltage Metalclad Switchgear Panel NXPLUS C	Conditional Approval with a maximum of 50 Units for observation and Assessment within a period of five (5) years	INFRED ELECTRICAL & TRADING COMPANY	03 May 2017
2.1.6	Toshiba Transmission and Distribution Systems Asia Sd	(Malaysia)	12kV/17.5Kv Metal-Clad VCB Type HVZ Series	Conditional Approval with a maximum of 50 Units for observation and Assessment within a period of five (5) years	SYARIKAT PERUSAHAAN ZAIBA DAN ADIK ADIK	03 May 2017
2.1.7	ABB Malaysia Sdn Bhd	(Malaysia)	Unigear ZS1 Medium Voltage, Air Insulated Metalclad Switchgear		MULTI GUNA TECHNOLOGIES SDN BHD	03 May 2017
2.1.8	PT. Siemens	(Indonesia)	11kV Metalclad Switchgear Panel NXAIR Rated: 1250A and 2500A, 17.5kV.3sec	(i) Limitation supply of not more than Fifty (50) sets of switchgears only until futher notice	INFRED ELECTRICAL & TRADING COMPANY	18 September 2019
2.1.9	NKT GmbH	(Germany)	Gas Insulated Switchgear (GIS) Termination Kit		B.H.F TECHNOLOGIES SDN BHD	15 December 2020

### 2.2 11KV SF6 RING MAIN UNIT SWITCHGEARS

- (i) 630A Extensible Modular
- (ii) 630A Non-Extensible
- (i) (ii) PURPLE COLOUR (SAME DESCRIPTION)

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
2.2.1	Schneider Electric	( France /U.K)	11KV Extensible RMU Ringmaster Range (CE-BR7,CE6-BR7 & SE6-BS)  11KV Non-Extensible RMU Ringmaster Range both 2R1T (RN2C) & 2R2T (RE2C + CE2)			
2.2.2	Lucy	(U.K)	Ring Main Unit 11KV	Extended warranty of the RMU(s)	ESC GROUP SDN BHD	18 September 2019
2.2.3	ABB India Limited	(India)		Conditional Approval with a maximum of 50 Units for observation and Assessment within a period of five (5) years	MULTI GUNA TECHNOLOGIES SDN BHD	27 April 2017



### 2.3 SUBSTATION EQUIPMENT - 72.5KV DEAD TANK AND LIVE TANK

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
2.3.1	Xian	(China)	72.5-500KV SF6 Live Tank Circuit Breaker with Integralcurrent Transformer 72.5-550KV SF6 Gas Insulated Switchgear GIS			
2.3.2	Siemens	USA	3AP1DT (DTCB), SPS2-72.5kV (DTCB)			
2.3.3	Areva (GE)	USA	DT1-72.5 F1 (DTCB)			
2.3.4	Magrini Galileo (Siemens)	Italy	SB6-123 (LTCB)			
2.3.5	Merlin Gerin (Siemens)	Italy	SB6-72 (LTCB)			
2.3.6	Areva (GE)	Germany	GL309 F3/4031/VR or F1/4031/VR (LTCB)		**	

#### 2.4 11KV / 0.433KV / 33KV DISTRIBUTION TRANSFORMERS & PADMOUNTED SUBSTATIONS

NO.	MANUFACȚURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
2.4.1	АВВ	(Singapore)	11KV / 0.433KV/33KV			
2.4.2	Ekarat	(Thailand)	DISTRIBUTION TRANSFORMER 300KVA TO 1500KVA		MASTER CABLE (B) SDN BHD	15 June 2017
2.4.2	Tira Thai	(Thailand)	200KVA-2000KVA / Tira thai, Distribution Transformer 11KV/433-250V			
2.4.3	PT. Unindo	(Indonesia)	1000 kVA			
2.4.4	Sesco Efacec Sdn Bhd	(Malaysia)	(i) Distribution Transformers 300kVA~1500kVA	Conditional Approval with a maximum of 50 Units for observation and Assessment within a period of five (5) years	L.K.H (B) SDN BHD (6 SEPTEMBER 2017)	27 April 2017
2.4.5	Charoenchai Transformer Co. Ltd	(Thailand)	Oil Immersed Distribution Transformer 300kVA - 1500kVA Approved Vendor List under BPMC	Approved Vendor List BPMC	CORIS TRADING CO	27 April 2017
2.4.6	Ekarat	(Thailand)	11KV Distribution Transformer - (300,500,800,1000,1500kVA)		PERUSAHAAN WADURA	24 April 2018
2.4.7	PT Bambang Djaja	(Indonesia)	B & D 11/0.433kV Power Distribution / Instrument Transformer		MULTIGUNA TECHNOLOGIES	21 October 2019



#### 2.5 POWER TRANSFORMERS

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
2.5.1	Daihen	(Thailand)	Power Transformer 66/11KV & Similar Range from 3 to 100MVA (36 to 170KV)			
2.5.2	Fuji	(Japan)				
2.5.3	Meidensha	(Japan)				
2.5.4	ABB LTD	(Vietnam)	ABB Oil Immersed Power Transformer > 36-170kV, < 63MVA			30 August 2018

#### 2.6 LOW VOLTAGE FEEDER PILLARS

i) Mini Feeder Pillars 400A

ii) Distribution Feeder Pillars 600A,800A,1200A,1600A

(i) (ii) - PURPLE COLOUR (SAME DESCRIPTION)

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
2.6.1	PKS	(Brunei)	(i) & (ii)	*		
2.6.2	Powertech	(Brunei)	(i)			
2.6.3	CE Industrial (B) Sdn Bhd	(Brunei)	400 TPN Mini Feeder Pillar - 6 Ways		CE INDUSTRIAL (B) SDN BHD	22 April 2019



### 2.7 SUBSTATION EQUIPMENT

(i) BATTERY CELL

#### (ii) CHARGERS

### (i) (ii) - PURPLE COLOUR (SAME DESCRIPTION)

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
2.7.1	Avatec	(Switzerland)	Niksa Battery Charger / UPS, Nica Nickel Cadmium Batteries & Leadline Acid Batteries			
2.7.2	Gutor	(Switzerland)	Lead Acid Battery & Nicad Battery Battery Charger			
2.7.3	Nimac	(Malaysia)	Battery Charger & Nickel - Cadmium Batteries			
2.7.4	SAFT Power	(Singapore)	Batteries (Nickel Cadmium / Lead Acid     Accessories / Spare Part Industrial Charges / Rectifiers &     D.C System			
2.7.5	Chloride Batteries S.E.Asia Pte Limited	(Singapore)	CBC Range			
2.7.6	Chloride Lead Acid Batteries	(South Africa)	YCP			
2.7.7	Gaz	(Germany)	KM Range			

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#### 3.0 COLUMNS AND POLES

### 3.1 STREET / COMPOUND LIGHTING COLUMNS, TRANSMISSION & DISTRIBUTION POLES

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
3.1.1	Lysaght Galvanized Steel Bhd	(Malaysia)	Street Lighting Poles 6M,8M,12M,15M,20M		L.K.H (B) SDN BHD	18 January 2012
3.1.2	Lysaght Galvanized Steel Bhd	(Malaysia)	Street Lighting Poles 10M		L.K.H (B) SDN BHD	6 December 2012
3.1.3	Unik	(Malaysia)	Unik Street Lighting Poles & Columns & Poles Accessories (Normal Height 8M, 10M & 12M Flange Types)			
3.1.4	Galvapole	(Malaysia)	Octagonal Lighting Column -1.5 Single Arm Column			
3.1.5	Ningbo	(China)	Street Lighting Poles (6M, 8M,10M & 12M)			
3.1.6	Unik	(Brunei Darussalam)	28 Ft and 35 Ft Galvanised Tubular Distribution Poles		UNIK GALVANIZING & METAL PRODUCTS SDN BHD	5 September 2019
3.1.7	Unik	(Brunei Darussalam)	8M, 10M and 12M Galvanised Street Lighting Columns		UNIK GALVANIZING & METAL PRODUCTS SDN BHD	5 September 2019

#### 3.2 ELECTRICAL POLES

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
3.2.1	Guangdong	(China)	28 & 35 Feet Tubular Steel Poles and Accessories			
3.2.2	Lysaght Galvanized Steel Bhd	(Malaysia)	28 Feet & 35 Feet Distribution Pole [Approval Granted for Transmission Poles 6M-50M]		L.K.H (B) SDN BHD	6 March 2008
3.2.3	Ningbo	(China)	28 Feet & 35 Steel Turbular Poles [Distribution Poles] / 66KV  Slim Poles -  1.Intermediate Pole (Planted Type)  2. >15-30 DEegree Angle Pole [Bolted Type]  3. >10-15 Degree Angle Pole [Bolted Type]  4. > 30-60 Degree Angle Pole [Bolted Type]  5. >60-90 Degree Angle Pole [Bolted Type]			



#### 4.0 LIGHTING SYSTEM

#### 4.1 OUTDOOR LIGHT FITTING AND ACCESSORIES

#### 4.1.1 HIGH PRESSURE SODIUM LANTERN

NO.	MANUFACTURER	COUNTRY OF ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE OF APPROVAL / REGISTRATION
4.1.1.1	Fael (S.P.A)	(Italy)	Street Lighting Lantern 1. Fael Luce - Smart VP (70W - 150W) 2. Fael Luce-Itinera VP (150W-400W)			
4.1.1.2	Gewiss	(Italy)	item (ii) only			
4.1.1.3	Lithonia	(U.S.A)	High Pressure Sodium Lantern		4	
4.1.1.4	Philips	(Holland / Malaysia)	item (i) only for Malaysia SGP 338/250W and 400W only			
4.1.1.5	Schreder	(Belgium / Malaysia)	High Sodium Lantern			
4.1.1.6	Success Electronics & Transformer Manufacturer Sdn B	(Malaysia)	Nikkon Street Lantern (Model HPS 250W S408 & HPS 150W S438) Malaysia		PERUSAHAAN WADURA	
4.1.1.7	Success Electronics & Transformer Manufacturer Sdn B	(Malaysia)	1. Nikkon S419 (B) 150W, 2. Nikkon S419 (B) 250W		PERUSAHAAN WADURA	18 January 2012
4.1.1.8	Success Electronics & Transformer Manufacturer Sdn B	(Malaysia)	Nikkon S419 (B) 400W		PERUSAHAAN WADURA	23 November 2013

#### 4.1.2 HIGH INTENSITY DISCHARGE LAMPS (METAL HALIDE, HIGH PRESSURE SODIUM, MERCURY LAMPS)

NO.	MANUFACTURER	COUNTRY OF ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE OF APPROVAL / REGISTRATION
4.1.2.1	GE	(Europe/U.S.A)	High Pressure Sodium			
4.1.2.2	Nikkon	(Japan)	Nikkon Ignitors (Model - 9000, SP9003)  Nikkon Sodium Ballast (Model - HPS-70W, HPS 100W, HPS 150W, HPS 400W)  Nikkon Mercury Ballast (Model - HPMV 250W, HPMV 400W)  Nikkon Metal Halide Ballast (Model - MH 70W, MH 150W, MH 250W, MH 400W)		PERUSAHAAN WADURA	
4.1.2.3	Osram	(Europe/China)	High Intensity discharge Lamps			
4.1.2.4	Philips	(Holland/China)	High Intensity discharge Lamps			
4.1.2.5	GE	(U.S.A)	Mercury Lamps			



### 4.1.3 i) IGNITORS FOR HIGH PRESSURE LAMPS

#### (ii) BALLASTS FOR HIGH PRESSURE LAMPS

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE OF APPROVAL / REGISTRATION
4.1.3.1	APF	(Italy)	Ignitors Ballast for High Pressure Lamp			
4.1.3.2	Atco	(Australia)	Ignitors Ballast for High Pressure Lamp			
4.1.3.3	Bagturgi	(Switzerland)	Ignitors item (i) only			
4.1.3.4	Layrton	(Spain)	Ballast for High Pressure Lamp			
4.1.3.5	Luxram	(Malaysia)	item (ii) only			
4.1.3.6	Nikkon	(Malaysia)	Ignitors Ballast for High Pressure Lamp			
4.1.3.7	Philips	(Holland/Netherland)	Ignitors Ballast for High Pressure Lamp			
4.1.3.8	Solex	(Malaysia)	Ignitors			
4.1.3.9	Teletronic '	(Europe)	item (i) only			
4.1.3.10	Vossloh- Schwabe	(Germany)	Ignitors Ballast for High Pressure Lamp			

#### 4.1.4 PHOTOCELLS

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE OF APPROVAL / REGISTRATION
4.1.4.1	KAGA	(Japan)				
4.1.4.2	Selcon	(Japan)				





### 4.1.5 LED STREET LIGHTING / STREET LANTERN

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
4.1.5.1	Ecosparks	(Singapore)	EVAN 210W (ESL-220-730-50*140) LED Street Lantern for 12 Metres Height Street Lighting		LETECH TECHNOLOGIES	16 April 2018
4.1.5.2	Ecosparks	(Singapore)	EVAN210W (ESLA-210-730-50*140) LED Street Lantern for 10 Metres Height Street Lighting		LETECH TECHNOLOGIES	12 January 2019
4.1.5.3	Dongguan Kingsun Optoelectronic Co.LTD	(China)	Kingsun-Appolo Series LED Street Light RL2R1084(180W) for 12Metres Height Street Lighting	Evaluated on project to project basis (20 April 2013)	L.K.H (B) SDN BHD	23 April 2018
4.1.5.4	NVC Lighting Technology Corporation	(China)	NVC Belfrey LED Street Lighting (180W) for 10Metres &12Metres Height Street Lighting		DSC ENGINEERING SDN BHD	21 April 2018
4.1.5.5	Oversea Lighting & Electric (M) Sdn Bhd	(Malaysia)	OLE LED DURA ST 180W for 12 Metres Height Street Lighting		PERUSAHAAN WADURA	02 August 2018
4.1.5.6	Oversea Lighting & Electric (M) Sdn Bhd	(Malaysia)	OLE LED DURA ST 150W for 10 Metres Height Street Lighting	8	PERUSAHAAN WADURA	30 October 2018
4.1.5.7	Philips Lighting PTE LTD	(Singapore)	Philips Roadflair BRP393 LED 240NW 200W 220-240V DWV for 12 Metres Height Stree Lighting	7	SKYFIELD ENGINEERING COMPANY (OPEN)	02 August 2018
4.1.5.8	Straits Design Sdn Bhd	(Malaysia)	(i) SCHREDER TECEO 2 229W for 10 Metres Height Street Lighting (ii) SCHREDER TECEO 196W for 12 Metres Height Street Lighting (iii) SCHREDER AMPERA 245W for 10 Metres Height Street Lighting (iv) SCHREDER AMPERA 213W for 12 Metres Height Street Lighting		TASYA SDN BHD	18 Disember 2018
4.1.5.9	Unilumin Group Co., Ltd	(China)	(i) LEDOLPHIN P8 (B) 180W for 10 Metres Height Street Lighting and (ii) LEDOLPHIN 3535 (B) 180W for 12 Metres Height Street Lighting		SKYFIELD ENGINEERING COMPANY (5 JULY 2024)	21 October 2019
4.1.5.10	Shanghai Fujing Lighting Technology Co.Ltd	(China)	Fujing LED Street Light Lantern 180W (FJ-SL102-180W) for Street Lighting 12M Height Fujing LED Street Light Lantern 180W (FJ-SL102-180W) for STreet Lighting 10M Height		SYARIKAT PERUSAHAAN ZAIBA & ADIK - ADIK	1 March 2021



### 5.0 BREAKERS, CONTACTORS, FUSE, FUSE LINKS & SWITCH DISCONNECTOR

#### 5.1 i) AIR - CIRCUIT BREAKERS

#### ii) MOULDED CASE CIRCUIT BREAKERS

#### iii) CONTACTORS

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
5.1.1	F&G	(Germany)				
5.1.2	Fuji	(Japan)	MAGNETIC CONTACTOR AND STARTER			
5.1.3	Hager	(France)				
5.1.4	Hitachi	(Japan)				
5.1.5	Hwa Shih item (ii) only	(Taiwan)	REGIS MODULED CASE CIRCUIT BREAKER (Regis NF100-MA 100A, Regis NF250-MA 225A, Regis NF400-HA 250A, 300A, 400A, Regis NF600-HA 500A)			
5.1.6	Legrand 4	(France)				
5.1.7	Lemag	(Singapore)				
5.1.8	LG	(Korea)	1. THREE POLE AIR CIRCUIT BREAKER LBA-16S-3EC 1600A (65KA), LBA-32S 3150A (65KA), LBA-32S-3EC 3150A (85KA)  1. MOLDED CASE CIRCUIT BREAKER (ABE 403b, ABS 403b, ABH 403b, ABL 403b, ABE 803b, ABS 803b, ABL 803b, 2. THREE POLE AIR CIRCUIT BREAKER LBA-16S-3EC 1600A (65KA), LBA-32S 3150A (65KA), LBA-32S-3EC 3150A (85KA), 3. THREE-POLE VACUUM CIRCUIT BREAKER SET IN METAL-ENCLOSURE  1. THREE POLE VACUUM CIRCUIT BREAKER SET IN METAL-ENCLOSURE  1. MAGNETIC CONTACTOR (GMC 100 & 125, GMC 150, GMS 150, GMC 150R, GMC 180, GMC 220, GMC 300, GMC 400, GMC 600, GMC 800)			
5.1.9	МЕМ	(U.K)				
5.1.10	Merlin Gerin	(France)				85
5.1.11	Mitsubishi	(Japan)				
5.1.12	Moeller	(Germany / Austria)				
5.1.13	PDL	(Australia)				
5.1.14	Schrack	(Austria)				
5.1.15	Schupa	(Germany)				
5.1.16	Siemens	(Germany)				
5.1.17	Square D	(U.K)				



### DEPARTMENT OF ELECTRICAL SERVICES, MINISTRY OF ENERGY

### GENERAL LISTS OF APPROVED PRODUCTS / MANUFACTURERS FOR MECHANICAL AND ELECTRICAL INSTALLATIONS

#### **REVISION 12TH JUNE 2021**

5.1.18	Telemecanique	(France)		
5.1.19	Terasaki	(Japan)		

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### 5.2 CUT-OUT FUSE AND SEALING CHAMBERS

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
5.2.1	вісс	(U.K)				
5.2.2	W.Lucy	(U.K)	11KV Volts SF6 Outdoor Ring Main Unit, LV Mini Feeder Pillar (Up to 400A)		ESC GROUP SDN BHD	
5.2.3	WT-Henley	(U.K)				

#### 5.3 HRC FUSE LINKS

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
5.3.1	Bussman	(U.K)			Harum Kejuruteraan	
5.3.2	Hawker	(U.K)				
5.3.3	Lawson	(U.K)				

#### 5.4 SWITCH - DISCONNECTOR

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
5.4.1	Jean Muller Gmbh Elektrotechnische Fabrik	(Germany)	Jean Muller Fuse Switch - Disconnector		TSK Sdn Bhd	1 March 2021

#### 6.0 ENGINES & ALTERNATORS

#### 6.1 DIESEL ENGINES

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
6.1.1	Cummins	(U.K /U.S.A)				
6.1.2	Volvo	(Sweden)				

#### 6.2 ALTERNATORS

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
6.2.1	Leroy Somer	(France/U.K)				
6.2.2	Mecc-alte	(Italy)				



#### 7 METER

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
7.1	Conlog	(South Africa)	1. Single Phase BEC 23 PLT 2. Three Phase BEC 33	-		
7.2	Conlog	(South Africa)	[10-80A & 20-100A] 1.) Phase BEC23PLT Prepayment Electricity Meter 2.) 3 Phase BEC33MCU Prepayment Electricity Meter		7	
7.3	Landis + Gyr Pte Ltd	(South Africa)	1. 10-GM046 ( 1 PHASE) & 10-3P012 ( 3 PHASE) - SINGLE UNIT 2. 10-EM08 (1 PHASE) & 10 3P012 ( 3 PHASE) - SPLIT UNIT 3. 10-PL004(1 PHASE) & 10-3P206 (3 PHASE) PLC SPLIT		LETECH TECHNOLOGIES (No validity)	04 June 2011
7.4	Shenzhen Star	(China)	STS Prepayment Meter - 1 Phase (DDSY23S) & 3 Phase (DTSY23S)		LE-ENERGY SOLUTIONS SDN BHD (10th December 2022)	04 June 2011
7.5	Conlog	(South Africa)	Conlog STS Prepayment Meter (BEC 62 (100A) -3ph)     Conlog STS Prepayment Meter (BEC33Hc(250A)	3ph Base on case by case basis		
7.6	Landis + Gyr Pte Ltd	(Singapore)	E350 Series Smart Meter :- (i) ZCF110ABeFs2 ( Single Phase Electricity Meter) (ii) ZMF110ABeFs2 (Three Phase Electricity Meter)		LETECH TECHNOLOGIES (No validity)	28 February 2018
7.7	Shenzhen Star Instrument	(China)	DTS27 Three Phase Four-Wire (3P4W) CT Operated Electronic Energy Meter Class 0.5S		LE-ENERGY SOLUTIONS SDN BHD (10th December 2022)	28 February 2018
7.8	Landis + Gyr Pte Ltd	(Singapore)	E550 Series Industrial & Commercial Electricity Meter		LETECH TECHNOLOGIES (No validity)	05 September 2019
7.9	Landis + Gyr Pte Ltd	(Greece)	E850 Series Three Phase High Precision Meter Class 0.2S		LETECH TECHNOLOGIES (No validity)	14 December 2020
7.1	Landis + Gyr Pte Ltd	(Greece)	E650 Series 4 Three Phase Industrial & Commercial Meter Class 0.5S		LETECH TECHNOLOGIES (No validity)	23 December 2020

### 8 DIESEL ENGINE (POWER STATION)

#### 8.1 DIESEL ENGINE PARTS (MB DESIGN)

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
8.1.1	Mirrlees Blackstone (MAN Diesel)	(U.K)	Assembler			

#### 8.2 DIESEL ENGINE PART REPAIR (MB DESIGN)

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
8.2.1	Mirrlees Blackstone (MAN Diesel)	(U.K)	Assembler			
8.2.2	Asiapac PTE LTD	(Singapore)	Overhaul, Repair, Reconditioning, Modification or Servicing & Testing of Diesel Engine, Components			

#### 8.3 DIESEL ENGINE FIELD SERVICES (MB DESIGN)

NO.	MANUFACTURER	COUNTRY of ORIGIN	PRODUCT CATEGORY & RANGE	REMARKS (CONDITIONS of RECOMMENDATION)	APPOINTED LOCAL AGENT	DATE of APPROVAL / REGISTRATION
8.3.1	Mirrlees Blackstone (MAN Diesel)	(U.K)	Assembler			
8.3.2	Asiapac PTE LTD	(Singapore)	Field Services			

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