



GENERAL LISTS OF APPROVED PRODUCTS / MANUFACTURERS FOR MECHANICAL AND ELECTRICAL INSTALLATIONS  
DEPARTMENT OF ELECTRICAL SERVICES  
NEGARA BRUNEI DARUSSALAM

REVISION 28 FEBRUARY 2026

This list is the official General Lists of Approved Products / Manufacturers for Mechanical and Electrical Installations in Brunei Darussalam. This list is updated on a regular basis to add or remove products / manufacturers as agreed by DES Product Registration Committee.

This listing is intended to be used as a reference for vendors in Brunei Darussalam. Products produced by manufacturers not listed herein are not acceptable to be use in the country. Manufacturers interested in registering their products should submit their application to the Department of Electrical Services for evaluation and appraisal. Newly approved products have a validity period of 3 years and will need to submit re-registration to the Department of Electrical Services for re-evaluation. The product will be removed from the list if no re-registration application is received without prior notification. The Department also would like to remind manufacturers that DES will conduct ongoing monitoring and evaluation of the product, focusing on technical support, compliance with relevant standards, and responsiveness to project invitations. DES also reserves the right to revoke acceptance without prior notification if the product is found to be non-compliant with the submitted standards, specifications, or quality requirements.

**1. CABLES**

**1.1. LOW VOLTAGE UNDERGROUND CABLES**

No (1.1)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Cable / Insulation Type	Voltage Level / Cable Size	
a	Iljin Industries [16 August 2000]	Korea	Iljin Cables (JPE/BP/OSS/1999 (24))		Intellbus System Sdn Bhd
			XLPE	600 / 1000V	
b	Kaiser Kabel GmbH [8 February 1995]	Germany	Kaiser LV Cables (JPE/BP/OSS/1995 (2))		
			XLPE/PVC Insulation		
c	Phelps Dodge International (Thailand) Ltd [3 May 2001]	Thailand	Phelps Dodge Low Voltage Cables		Amec Engineering Sdn Bhd
				600 / 1000V	

No (1.1)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Cable / Insulation Type	Voltage Level / Cable Size	
d	Draka SCM (Singapore Cable SCM)	Singapore	DRAKA Cables (UG)		
			XLPE/SWA/PVC and PVC/SWA/PVC		
e	L.K.H (B) Sdn Bhd [11 April 1998]	Brunei	LKH Insulated Armoured Cable (JPE/BP/OSS/1998 (12.1))		Not Applicable
			XLPE	2C (16, 25, 35) mm sq. 4C (16, 25, 35, 70, 95, 120, 185, 240) mm sq. 1C (400, 500, 630) mm sq.	
			PVC	2C (16, 25, 35) mm sq. 4C (16, 25, 35) mm sq.	
f	L.K.H (B) Sdn Bhd [17 August 1998]	Brunei	LKH Insulated Armoured Cable (JPE/BP/OSS/1997 (12.3))		Not Applicable
			XLPE	2C 50 mm sq. 4C 50 mm sq.	
			PVC	2C (1.5, 2.5, 4, 6, 10) mm sq. 4C (1.5, 2.5, 4, 6, 10) mm sq.	
g	Leader Cable Industry Berhad [12 June 2017]	Malaysia	Leader Low Voltage Cable		
			CU/XLPE/SWA/PVC	Up to 4C x 240 mm sq.	
			XLPE/PVC/AWA/PVC	1C x 500 mm sq.	
h	Baosheng Science & Technology Innovation [7 June 2017]	China	Baosheng Low Voltage Cable (DES/BAOSHENG/LVXLPE/01/2017)		
			CU/XLPE/SWA/PVC Cable	Up to 4C x 240 mm sq.	
			XLPE/PVC/AWA/PVC	1C x 500 mm sq.	
i	Daewon Cable Co. Ltd [21 October 2019]	Korea	Daewon Low Voltage & Pilot Cables (JPE/JKPP/DAEWON(Korea)/LV&PILOT-Cables/01/2019)		
			XLPE/SWA/PVC and PVC/SWA/PVC		

No (1.1)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Cable / Insulation Type	Voltage Level / Cable Size	
j	Olympic Cable [25 March 2020]	Malaysia	Olympic LV Cable (JPE/UP/OLYMPIC(Malaysia)/LV-PowerCables/AST/01/2020)		AST Enterprise
			Cu/XLPE/SWA/PVC	4C up to 240 mm sq.	
k	Sigma Cable Company Pte Ltd [17 Mar 21 – 1 Mar 24]	Singapore	Sigma Fire Resistant Cable (DES/PRC/Sigma/01/MoM1.21)		Functional Engineering Sdn Bhd
			XSL-FR-600M	Size 2C x 1.5 mm sq. to 4C x 400 mm sq.	
			XL-FR-600M	Size 2C x 1.5 mm sq. to 4C x 400 mm sq.	
			XL-FR-600S	Size 1C x 2.5 mm sq. to 1C x 630 mm sq.	
l	Master Tec Wire and Cables Sdn Bhd [4 Sep 23 – 24 Aug 26]	Malaysia	Master Tec Wire Low Voltage Underground Cable (DES/PRC/MasterTec/01/MoM4.23)		Master Cable (B) Sdn Bhd
			XLPE Insulated Armoured With Copper Stranded	4C x 70 mm sq. 4C x 95 mm sq. 4C x 120 mm sq. 4C x 185 mm sq. 4C x 240 mm sq.	
m	Taihan Electric Wire Company Ltd [22 April 1999]	Korea	Taihan Fire Resistant Cable (JPE/BP/OSS/98 (39))		
			XLPE/LSF	4C x 300 mm sq. 1C x 25 mm sq. 5C x 4 mm sq.	

No (1.1)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Cable / Insulation Type	Voltage Level / Cable Size	
n	Tai Sin Electric Limited [3 Jul 24 – 20 Jun 27]	Singapore	Taisin Insulated Armoured Cable (DES/PRC/Taisin/01/MoM3.24)		L.K.H (B) Sdn Bhd
			XLPE/SWA/PVC	4C x 70 mm sq. 4C x 95 mm sq. 4C x 120 mm sq. 4C x 185 mm sq. 4C x 240 mm sq.	

## 1.2. LOW VOLTAGE OVERHEAD LINES

No (1.2)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Cable / Insulation Type	Voltage Level / Cable Size	
a	Leader Cable Industry Berhad [13 June 2017]	Malaysia	Leader ABC Cable		
				Up to 4C x 185 mm sq. + 25 mm sq.	
b	DRAKA SCM (Singapore Cable SCM)	Singapore	DRAKA Low Voltage Aerial Bundle Conductor		
c	Universal	Malaysia	Universal Power Cable, Pilot Cable, Fire Resistant Cable, Instrument Cable & Control Cable		
			XLPE	Up to 11KV	
d	Wuhan Sunni Electric Wire & Cables [14 December 2020]	China	Wuhan Sunni Aerial Bundle Conductor		Syarikat Perusahaan Zaiba & Adik - Adik
				4C x 25 mm sq. 4C x 35 mm sq. 4C x 120 mm sq. + 25 mm sq.	
e	Wuhan Sunni Electric Wire & Cables [1 Mar 21 – 1 Mar 24]	China	Wuhan Sunni Low Voltage Aerial Bundle Conductor (DES/PRC/WuhanSunni/01/MoM1.21)		Syarikat Perusahaan Zaiba & Adik - Adik
				4C x 185 mm sq. + 25 mm sq.	

No (1.2)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Cable / Insulation Type	Voltage Level / Cable Size	
f	L.K.H (B) Sdn Bhd [25 Mar 23 – 31 Mar 26]	Brunei	LKH Low Voltage Overhead Lines (Aerial Bundle Conductor) (DES/PRC/LKH/01/MoM2.23)		Not Applicable
				4 X 25 mm sq., 4 X 35 mm sq., 4 X 50 mm sq., 4 X 70 mm sq., 4 X 95 mm sq., 4 X 120 mm sq. + 25 mm sq., 4 X 150 mm sq. + 25 mm sq., 4 X 185 mm sq. + 25 mm sq.	
g	Phelps Dodge International (Thailand) Ltd [19 Apr 23 – 20 Apr 26]	Thailand	Phelps Dodge Overhead Lines (Aerial Bundle Conductor) (DES/PRC/PD/01/MoM3.23)		Amec Engineering Sdn Bhd
				4 X 120 mm sq. + 25 mm sq., 4 X 150 mm sq. + 25 mm sq., 4 X 185 mm sq. + 25 mm sq.	

### 1.3. 11KV UNDERGROUND CABLES

No (1.3)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Cable / Insulation Type	Voltage Level / Cable Size	
a	Federal Powers Sdn Bhd [16 December 2000]	Malaysia	Federal Underground Cables (JPE/BP/OSS/1999 (23))		Syarikat Manisha Sdn Bhd
			XLPE	11kV	
b	LG Tek	Korea			
c	Taihan Electric Wire Co. Ltd [11 March 1997]	(Korea, Vietnam)	Taihan Cable (JPE/BP/OSS/1995/3 (B))		
			XLPE/LD/DSTA PVC Cables LPE/LD/DSTA/PVC Cables XLPE/LD/DSTA/PVC Cables	3C / 95 mm sq. 3C / 185 mm sq. 3C / 300 mm sq.	
d	Taihan Cable Vina Co. Ltd	Vietnam	Power Cable		
			XLPE	8.7/15kV (Up to 300 mm sq.)	

No (1.3)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Cable / Insulation Type	Voltage Level / Cable Size	
e	PCM	Malaysia	PCM Medium Voltage Cables		
			XLPE	11kV	
f	PT. Prysmian [16 April 2018]	Indonesia	PT. Prysmian Medium Voltage Lead Sheath Cable (JPE/UP/PT.PRYSMIAN (Indonesia)/MV CABLES/01/2018)		
			Cu/XLPE/LS/DSTA/PVC	11kV, 3 X 95 mm sq. 3 X 185 mm sq. 3 X 300 mm sq. 1 X 630 mm sq.	
g	Daewon [4 December 2013]	Korea	Daewon Cable (JPE/REG/OSS/2013 (12))		
			XLPE LS Cable	11KV (Up to 3C x 300 mm sq.)	
h	Universal Cable (M) Bhd [22 August 2006]	Malaysia	Universal Power Cable (JPE/OSS/2006 (02))		
			XLPE Power Cable	(Up to 11kV)	
i	LS – Vina Cable and Systems [3 Jul 24 – 20 Jun 27]	Vietnam	LS Vina (DES/PRC/LSVina/01/MoM3.24)		L.K.H (B) Sdn Bhd
			Cu/XLPE/CWS/ LEAD/DSTA/PVC-W	6.35/11kV, 3 x 95 mm sq., 3 x 185 mm sq., 3 x 300 mm sq.	
j	Phelps Dodge International (Thailand) Ltd [28 Nov 24 – 20 Nov 27]	Thailand	Phelps Dodge (DES/PRC/PD/01/MoM7.24)		Amec Engineering Sdn Bhd
			Cu/XLPE/CWS/LS/DSTA/PVC	11kV, 3C x 95 mm sq., 3C x 185 mm sq., 3C x 300 mm sq.	
k	Baosheng Science & Technology Innovation Co., Ltd [11 Feb 26 – 31 Jan 29]	China	Baosheng (DES/PRC/BAOSHENG/02/MoM1.26)		Syarikat Perusahaan Zaiba dan Adik - Adik
			Cu/XLPE/CWS/LS/PVC/DSTA/ PVC	11kV, 3C x 185 mm sq.	
l	Baosheng Science & Technology Innovation Co., Ltd [11 Feb 26 – 31 Jan 29]	China	Baosheng (DES/PRC/BAOSHENG/03/MoM1.26)		Syarikat Perusahaan Zaiba dan Adik - Adik
			Cu/XLPE/CWS/LS/PVC/DSTA/ PVC	11kV, 3C x 300 mm sq.	

1.4. 11KV OVERHEAD LINES

No (1.4)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Cable / Insulation Type	Voltage Level / Cable Size	
a	Leader Cable Industry Berhad [27 Dec 2025 – 31 Dec 28]	Malaysia	Leader Triplex Aerial Bundled Conductor (DES/PRC/LEADER/01/MoM5.25)		-
			Aluminium XLPE/SCT/PVC/AL A.B.C	11kV, 300 mcm 3C x 150 mm sq. + 1C x 70 mm sq. [6.35/11kV]	
b	Wuhan Sunni Electric Wire & Cables [11 Feb 26 – 31 Jan 28]	China	Wuhan Sunni Triplex Self Supporting Aerial Cables (DES/PRC/WUHAN/01/MoM1.26)		Syarikat Perusahaan Zaiba & Adik – Adik
			Galvanized Steel Messenger Wire	11kV, 3 Core / 300 mcm	
c	Wuhan Sunni Electric Wire & Cables [1 March 2021]	China	Wuhan Sunni Triplex Self Supporting Aerial Cables (DES/PRC/WuhanSunni/02/MoM1.21)		Syarikat Perusahaan Zaiba & Adik – Adik
			Galvanized Steel Messenger Wire	11kV, 3C x 350 mcm, 3C x 400 mcm, 3C x 450 mcm, 3C x 500 mcm, 3C x 550 mcm, 3C x 600 mcm.	
d	Phelps Dodge International (Thailand) Ltd [19 Apr 23 – 20 Apr 26]	Thailand	Phelps Dodge Aerial Cable (DES/PRC/PD/01/MoM3.23)		Amec Engineering Sdn Bhd
				11kV, 3C x 300 mcm	

1.5. 66KV AND ABOVE UNDERGROUND CABLES

No (1.5)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Cable / Insulation Type	Voltage Level / Cable Size	
a	Federal Powers	Malaysia	Federal Powers Underground Cables ( <i>JPE/BP/OSS/1999 (23)</i> )		Syarikat Manisha Sdn Bhd
			XLPE	33KV & 66KV	
b	LG Tek				
c	Phelps Dodge International (Thailand) Ltd [3 Jul 24 – 20 Jun 27]	Thailand	PD Power Cables ( <i>DES/PRC/PD/01/MoM3.24</i> )		Amec Engineering Sdn Bhd
			Cu/XLPE/CWS/LS/MDPE	Single Core, 66kV, 1000 mm sq.	
d	Pirelli				
e	LS – Vina Cable [18 May 2010]	Vietnam	LS-VINA High Voltage Cables ( <i>JPE/BP/OSS/2009 (01)</i> )		ASD Engineering Sdn Bhd
				Up to 170kV UP to conductor size 1000sqmm	
f	Suedkabel GMBH [20 November 2007]	Germany	Suedkabel ( <i>JPE/BP/OSS/2007 (20)</i> )		PTD Technology Sdn Bhd
			XLPE/Lead Sheathed Cable	66kV	
g	PCM	Malaysia	High Voltage Cables		
				33kV & 66kV	
h	Ningbo Orient Wires & Cables Co., Ltd [4 April 2020]	China	Ningbo Orient Underground Cables ( <i>JPE/UP/NINGBO (China)/UG-Cables/FRASER/01/2020</i> )		Fraser Intel Solutions Sdn Bhd
			Type Lead Sheath	66kV, 1C x 630 mm sq.	
i	TBEA Shandong Luneng Taishan Cable Co., Ltd [5 Jul 25 – 1 Jul 28]	China	TBEA Underground Cable ( <i>DES/PRC/TBEA/01/MoM3.25</i> )		Sivli Sdn Bhd
			CU/XLPE/CAS/MDPE CU/XLPE/CAS/LSHF	66kV, 500 mm sq.	
j	PT. Prysmian Cables Indonesia [10 Apr 24 – 30 Apr 27]	Indonesia	Prysmian ( <i>DES/PRC/PT.Prysmian/01/MoM2.24</i> )		Syarikat Perusahaan Zaiba dan Adik - Adik
			Lead Sheath Cable	66kV & 150kV, 87/150 (170) kV, 1 x 630 mm sq., 1 x 800 mm sq. 1 x 1000 mm sq., 1 x 1200 mm sq. 1 x 2000 mm sq.	

1.6. 66KV AND ABOVE OVERHEAD CABLE

No (1.6)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Cable / Insulation Type	Voltage Level / Cable Size	
a	Wuhan Sunni Electric Wire & Cable [1 Mar 21 – 1 Mar 24]	China	ACSR Product Bare Conductor (DES/PRC/WuhanSunni/03/MoM1.21)		Syarikat Perusahaan Zaiba & Adik - Adik
				AAAC: Yew, Upas, Hornet ACSR: Drake, Wolf, Goat, Bison	

1.7. POWER CABLES ACCESSORIES

No (1.7)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Termination & 66kV Cable Sealing End Kits (Indoor/Outdoor)	Jointing Kits (Low Voltage – 11kV / 66kV)	
a	3M	USA			
b	Cellpack	Switzerland / Germany			
c	Kabeldon	Sweden			
d	Pirelli	UK			
e	Raychem				
f	REPL Engineering Ltd [13 January 1999]	India	REPL (JPE/BP/OSS/1998 (40))		
			11KV Heat Shrinkable 3 Core Cable Termination (Indoor / Outdoor)		
g	REPL (M) Sdn Bhd [28 January 2003]	Malaysia	REPL (JPE/BP/OSS/2001 (21))		
			Heat Shrinkable Cable Termination (Outdoor / Indoor Termination for Voltage Level 11KV - 33KV)		
h	Sigmaform	UK			

No (1.7)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Termination & 66kV Cable Sealing End Kits (Indoor/Outdoor)	Jointing Kits (Low Voltage – 11kV / 66kV)	
i	Sucofit [12 September 1998]	Switzerland	SUCOFIT (JPE/BP/OSS/98 (15))		
			Non -Tracking Outdoor Tubing	Heat - Shrinkable 11KV	
j	Suedkabel GMBH	Germany			
			66KV XLPE/ Cable Accessories i) Outdoor / GIS Termination ii) Normal / Insulated Joints	Cable Accessories: i) Outdoor / GIS Termination ii) Normal / Insulated Joints	
k	Nexans Italia SPA [27 April 2017]	Italy	Nexans (DES/NEXANS/ Termination&Jointkit/Italy/01/2017)		Rennah Services Sdn Bhd
			Medium / Low Voltage, Termination & Jointing Kits		
l	NKT GmbH [15 December 2020]	Germany	NKT (JPE/MINIT/UP/GIS-TerminationKit/BHFT/GERMANY/2020(11))		B.H.F Technologies Sdn Bhd
			Gas Insulated Switchgear (GIS) Termination Kit		
m	Jiangsu Jiameng Electrical Equipment Co., Ltd [28 Nov 24 – 20 Nov 27]	China	MELEC Heat Shrinkable Accessories (DES/PRC/MELEC/01/MoM7.24)		DSC Engineering Company Sdn Bhd
			Termination kit MZDNK-3-15-185 (3C/Indoor Underground Cable) MZDWK-3-15-185 (3C/Outdoor Underground Cable)	Jointing Kit MZJK-3-15-185 (3C/Underground Cables)	

1.8. CABLE ACCESSORIES

No (1.8)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	TBEA Shandong Luneng Taishan Cable Co. [8 Jun 21 – 2 Jun 24]	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 (DES/PRC/Tbea/01/MoM2.21)	Sivli Sdn Bhd
b	Yongjiu Electric Power Fitting Co., Ltd [8 Oct 25 – 8 Oct 28]	China	Yojiu Electric Cable Accessories Cable Lug, PG Clamp (2 Bolts and 3 Bolts Only, Size from 4C/70mm <sup>2</sup> to 4C/240mm <sup>2</sup> ), ABC Clamp, Insulation Piercing Connector (2 Bolts and 3 Bolts only, Size: from 4C/70mm <sup>2</sup> to 4C/240mm <sup>2</sup> ) (DES/PRC/YONGJIU/01/MoM4.25)	DSC Engineering Company Sdn Bhd
c	Jiangsu Jiameng Electrical Equipment Co., Ltd [27 Dec 25 – 31 Dec 28]	China	Melec Insulation Piercing Connector (JBC/PG), Pre-Insulation Aluminium Connector (MJPT), Suspension Clamp (SPC) & Parallel Groove Connector (ALPG) (DES/PRC/JIANGSU/02/MoM5.25)	DSC Engineering Company Sdn Bhd

1.9. EARTHING GRID SYSTEMS

No (1.9)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	Cadweld	UK		
b	Furse	UK		
c	Heng	Singapore		
d	Unitech Electric Private Limited [22 July 1998]	Singapore	UNITECH 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. [JPE/BP/OSS/1998 (7)]	
e	Wellflex (Earth Pit)	UK		

1.10. INSULATORS

No (1.10)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	NGK	Japan, China		
b	Dalian Insulator (Fujing) Co. Ltd [28 Sep 24 – 26 Sep 27]	China	Dalian Insulator (Porcelain Suspension – Model 40 – 550kN) (DES/PRC/Dalian/01/MoM5.24)	Syarikat Perusahaan Zaiba dan Adik - Adik

1.11. SURGE ARRESTOR (LOW VOLTAGE / HIGH VOLTAGE)

No (1.11)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	ABB	Sweden	72.5KV	

## 2. SWITCHGEARS

### 2.1. MEDIUM VOLTAGE METALCLAD SWITCHGEAR (11KV TO 33KV)

No (2.1)	Manufacturers	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	Schneider Electric Limited [26 February 2005]	France / UK	Schneider Genie Evo 11kV Metalclad Switchgear (JPE/BP/OSS/2004 (20))	
b	Schneider Electric Indonesia [24 November 2007]	Indonesia	Schneider McSet (INDONESIA) Model AD2 (JPE/BP/OSS/2007 (10))	
c	Siemens [3 May 2017]	Germany	Siemens 11kV Medium Voltage Metalclad Switchgear Panel NXPLUS C (DES/Siemens/NXPLUSC/Germany/01/2017)	Infred Electrical & Trading Company
d	Toshiba Transmission and Distribution Systems Asia Sdn Bhd [3 May 2017]	Malaysia	Toshiba 12kV/17.5kV Metal-Clad VCB Type HVZ Series 1250A & 630A (DES/TOSHIBA/SWITCHGEAR/Malaysia/01/2017) *Conditional Approval with a <b>maximum of 50 Units</b> for observation and Assessment <b>within a period of five (5) years</b>	Toshiba Transmission & Distribution Systems Asia Sdn Bhd (Brunei Branch)
e	Siemens [3 May 2017]	China	Siemens 11kV Medium Voltage Metalclad Switchgear Panel NXPLUS C (DES/Siemens/NXPLUSC/China/01/2017) *Conditional Approval with a <b>maximum of 50 Units</b> for observation and Assessment <b>within a period of five (5) years</b>	Infred Electrical & Trading Company
f	Toshiba Transmission and Distribution Systems Asia Sdn Bhd [5 Dec 22 – 31 Dec 25]	Malaysia	Toshiba 12kV/17.5kV Metal-Clad VCB Type HVZ Series 2000A & 2500A (DES/PRC/Toshiba/01/MoM6.22)	Toshiba Transmission & Distribution Systems Asia Sdn Bhd (Brunei Branch)
g	ABB Malaysia Sdn Bhd [3 May 2017]	Malaysia	ABB Unigear ZS1 Medium Voltage, Air Insulated Metalclad Switchgear (DES/ABB/unigearZS1/Malaysia/01/2017)	Multiguna Technologies Sdn Bhd
h	PT. Siemens [18 September 2013]	Indonesia	PT. Siemens 11kV Metalclad Switchgear Panel NXAIR Rated: 1250A and 2500A, 17.5kV.3sec (JPE/JKPP/MVSwitchgearNXAIR/PT.Siemens (Indonesia)/01/2019)	Infred Electrical & Trading Company

## 2.2. 11KV SF6 RING MAIN UNIT SWITCHGEARS

No (2.2)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent / Authorized Representatives
			630A Extensible Modular	630A Non - Extensible	
a	Schneider Electric UK [18 May 2010]	France / UK	Schneider RMU Ringmaster (JPE/BP/OSS/2007 (12))		
			11kV Extensible Range (CE2-BR7, CE6-BR1 & SE6-BS)	11kV Non-Extensible Range both 2R1T (RN2C) & 2R2T (RE2c + CE2)	
b	Lucy Asia Pacific Sdn Bhd [3 Sep 24 – 20 Aug 27]	Thailand	Lucy Electric (DES/PRC/Lucy/01/MoM4.24)		ESC Group Sdn Bhd
				Ring Main Unit (AEGIS) up to 24kV	
c	ABB India Limited [5 Jul 25 – 1 Jul 28]	India	ABB SF6 Ring Main Unit Safelink / Safelink Plus CB 12KV 630A (DES/PRC/ABB/01/MoM1.25)		Multiguna Technologies Sdn Bhd Azima Sdn Bhd
				11kV Non Extensible Type CVC (2R1T)	
d	Toshiba Transmission & Distribution Systems Asia Sdn Bhd [4 Sep 24 – 20 Aug 27]	Malaysia	TTDA Ring Main Unit (DES/PRC/TTDA/01/MoM4.24)		Toshiba Transmission & Distribution Systems Asia Sdn Bhd (Brunei Branch)
				Circuit Breaker Type FR24V-12kV-630A	
e	ABB India Limited [5 Jul 25 – 1 Jul 28]	India	ABB Ring Main Unit Safe Ring / Safe Plus 630A (DES/PRC/ABB/01/MoM3.25)		Syarikat Perusahaan Zaiba dan Adik – Adik Multiguna Technologies Sdn Bhd
				11kV Non Extensible Type CVCV (2R2T) & CCCV (3R1T)	

## 2.3. SUBSTATION EQUIPMENT – 72.5KV DEAD TANK AND LIVE TANK

No (2.3)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	Xian High Voltage Apparatus Works [7 April 1999]	China	1. 72.5 - 550KV SF6 Live Tank Circuit Breaker with Integral current Transformer 2. 72.5 - 550KV SF6 Gas Insulated Switchgear GIS (JPE/BP/OSS/98 (47))	
b	Siemens	USA	3AP1DT (DTCB), SPS2-72.5kV (DTCB)	
c	GE	USA	Areva DT1-72.5 F1 (DTCB)	

No (2.3)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
d	Siemens	Italy	Merlin Gerin SB6-72 (LTCCB)	
e	GE	Germany	Areva GL309 F3/4031/VR or F1/4031/VR (LTCCB)	

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

No (2.4)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	ABB	Singapore	11KV / 0.433KV/33KV	
b	Ekarat Engineering PCL [5 Dec 22 – 31 Dec 25]	Thailand	Oil Immersed Distribution Transformer 11kV 300kVA, 500kVA, 800kVA, 1000kVA, 1500kVA, 2000Kva (DES/PRC/Ekarat/01/MoM6.22)	Perusahaan Wadura
c	Tira Thai CO., Ltd [6 April 2000]	Thailand	Distribution Transformer 200KVA - 2000KVA, 11KV/433-250V (JPE/BP/OSS/98 (33))	
d	PT. Unindo [15 March 2006]	Indonesia	3 Phases, 1000kVA, 20kV – 400 V, 50Hz, Dyn5 (JPE/OSS/2005 (42))	
e	Sesco Efacec Sdn Bhd [27 April 2017]	Malaysia	(i) Distribution Transformers 300kVA~1500kVA (DES/SESCOEFACEC/Transformer/Malaysia/01/2017)  *Conditional Approval with a <b>maximum of 50 Units</b> for observation and Assessment <b>within a period of five (5) years</b>	L.K.H (B) Sdn Bhd
f	Charoenchai Transformer Co. Ltd [27 April 2017]	Thailand	Oil Immersed Distribution Transformer 300kVA - 1500Kva	Coris Trading Co
g	PT Bambang Djaja [21 October 2019]	Indonesia	B & D 11/0.433kV Power Distribution / Instrument Transformer (JPE/UP/B&D11/0.433KV/PT-BDJ(Indonesia)/PD/I-Transformer/01/2019)	Multiguna Technologies

2.5. POWER TRANSFORMERS

No (2.5)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	Daihen Electric Co., Ltd [28 October 2000]	Thailand	Power Transformer 66/11KV & Similar Range from 3 to 100MVA (36 to 170KV) (JPE/BP/OSS/2000 (18))	Marubeni Corporation
b	Fuji	Japan		
c	Meidensha	Japan		
d	Arteche Dyh Electric Co., Ltd [10 Apr 24 – 30 Apr 27]	China	Arteche UT-72 Inductive Voltage Transformer (DES/PRC/Arteche/01/MoM2.24)	PTD Technology Sdn Bhd

2.6. LOW VOLTAGE FEEDER PILLARS

No (2.6)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Mini Feeder Pillars 400A	Distribution Feeder Pillars 600A, 800A, 1200A, 1600A	
a	PKS [6 April 2000]	Brunei		PKS (JPE/BP/MISC/1996)	Not Applicable
				400A – 1600A Outdoor Feeder Pillars	
b	PKS [6 April 2000]	Brunei	PKS (JPE/BP/OSS/98 (9))		Not Applicable
			Mini Feeder Pillars 400A		
c	PKS [September 1996]	Brunei		PKS (JPE/BP/MISC/1996)	Not Applicable
				400A – 1600A Outdoor Feeder Pillars	
d	Powertek Engineering Sdn Bhd	Brunei	Powertek		Not Applicable
			Mini Feeder Pillars 400A		
e	Powertek Engineering Sdn Bhd [3 Sep 24 – 20 Jun 27]	Brunei	Powertek (DES/PRC/Powertek/01/MoM4.24)		Not Applicable
				Distribution Feeder Pillar 600A, 800A, 1200A, 1600A	

No (2.6)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Mini Feeder Pillars 400A	Distribution Feeder Pillars 600A, 800A, 1200A, 1600A	
f	CE Industrial (B) Sdn Bhd [22 April 2019]	Brunei	CE (JPE/UP/CE/MFP/BRUNEI/01/2019)		Not Applicable
			400 TPN Mini Feeder Pillar – 6 Ways		
g	CE Industrial (B) Sdn Bhd [20 Mar 2025 – 10 Mar 28]	Brunei	CE DISTRIBUTION FEEDER PILLAR (DES/PRC/CE/01/MoM2.25)		Not Applicable
				CE/DFP501/600A & CE/DFP801/800A	

## 2.7. SUBSTATION EQUIPMENT

No (2.7)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Battery Cell	Chargers	
a	Avatec Power Pte Ltd [16 February 2010]	Switzerland	(JPE/BP/OSS/2008 (21))		Intan Electric Company Sdn Bhd
			Nica Nickel Cadmium Batteries & Leadline Acid Batteries	Niksa Battery Charger / UPS	
b	GUTOR Electronics Ltd [2 May 2001]	Switzerland	Gutor AC & DC Uninterruptible Power Supply (UPS), Rectifier, Battery Charger, Lead Acid Battery and Nicad Battery (JPE/BP/OSS/2000 (30))		Shinba Integrated Engineering Services
			Lead Acid Battery & Nicad Battery	Battery Charger	
c	Nimac Power Systems (M) Sdn Bhd [25 June 2008]	Malaysia	(JPE/BP/OSS/2008 (04))		PTD Technology Sdn Bhd
			Nickel – Cadmium Battery Type L - P	Niksa Battery Charger (1) Type NSC (Single Phase) (2) Type NTC (Three Phase)	
d	SAFT Power Systems Pte Ltd [16 February 2006]	Singapore	SAFT Power Systems (JPE/OSS/2005 (30))		Joffren Omar Company Sendirian Berhad
			(c) Batteries (Nickel Cadmium / Lead Acid) Accessories / Spare Part	(b) Industrial Charger / Rectifiers & D.C System	

No (2.7)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Battery Cell	Chargers	
e	Chloride Batteries S.E Asia Pte Limited [3 Jul 24 – 20 Jun 27]	China	Chloride (DES/PRC/Chloride/01/MoM3.24)		Progressive Impact Technology (B) Sdn Bhd
			Nickel Cadmium Battery Model CBM		
f	Chloride Lead Acid Batteries	South Africa	Chloride		
			YCP		
g	Gaz	Germany	Gaz		
			KM Range		

## 2.8. REMOTE TERMINAL UNIT (RTU)

No (2.8)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	Remsdaq Limited [29 Oct 24 – 16 Oct 27]	United Kingdom	CALLISTO <sup>NX</sup> Remote Terminal Unit Scada (DES/PRC/REMSDAQ/01/MoM6.24)	Toshiba Transmission & Distribution Systems Asia Sdn Bhd (Brunei Branch)
b	Grid Vision T&D Sdn Bhd [13 Nov 24 – 16 Oct 27]	China	DONGFANG Electronics Remote Terminal Unit DF1725IED (DES/PRC/GRIDVISION/01/MoM6.24)	PTD Technology Sdn Bhd

### 3. COLUMNS AND POLES

#### 3.1. STREET LIGHTING COLUMNS

No (3.1)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]						Local Agent
			6M	8M	10M	12M	15M	20M	
a	Lysaght Galvanized Steel Bhd [18 January 2012]	Malaysia	Lysaght Street Lighting Poles						L.K.H (B) Sdn Bhd
			6M, 8M			12M, 15M, 20M			
b	Lysaght Galvanized Steel Bhd [6 December 2012]	Malaysia	Lysaght Street Lighting Poles						L.K.H (B) Sdn Bhd
					10M				
c	Unik Galvanizing & Metal Products Sdn Bhd [5 September 2019]	Malaysia	Unik Galvanised Street Lighting Columns (JPE/JKPP/Galv.St.LightingColumns/UNIK (Brunei Darussalam)/01/2019)						Not Applicable
				8M	10M	12M			
d	Galvapole Industries Sdn Bhd [30 May 2006]	Malaysia	Galvapole Octagonal Lighting Columns – 1.5 Single Arm Column (JPE/OSS/2003 (30))						Ting Sli King Electrical Supplies Sdn Bhd
e	Unik Galvanizing & Metal Products Sdn Bhd [5 September 2013]	Brunei	Unik						Not Applicable
				8M, 10M and 12M Galvanized Street Lighting Columns					

#### 3.2. ELECTRICAL POLES

No (3.2)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			28 Feet	35 Feet	
a	Guangdong	China	Guangdong Tubular Steel Poles and Accessories		
			28 Feet	35 Feet	
b	Lysaght Galvanized Steel Bhd [6 March 2008]	Malaysia	Lysaght Distribution Pole (Approval Granted for Transmission Poles 16M-50M) (JPE/BP/OSS/2007 (18))		L.K.H (B) Sdn Bhd
			28 Feet	35 Feet	

No (3.2)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			28 Feet	35 Feet	
c	Unik Galvanizing & Metal Products Sdn Bhd [5 September 2019]	Brunei	Unik Galvanised Tubular Distribution Poles (JPE/JKPP/GalvTubularDist.Poles/UNIK (Brunei Darussalam)/01/2019)		Not Applicable
			28 Feet	35 Feet	
d	Yuyao Jiyou Lighting Technology Co., Ltd [28 Nov 24 – 20 Nov 27]	China	Jiyou Steel Tubular Poles (DES/PRC/Jiyou/01/MoM7.24)		Azima Sendirian Berhad
			28 Feet	35 Feet	

#### 4. LIGHTING SYSTEM

##### 4.1. OUTDOOR LIGHT FITTING AND ACCESSORIES

##### 4.1.1. HIGH PRESSURE SODIUM LANTERN

No (4.1.1)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Lantern	Floodlight	
a	Fael (S.P.A)	Italy	Fael Luce Street Lighting Lantern		
			Smart VP (70W – 150W) Itinera VP (150W – 400A)		
b	Gewiss	Italy	Gewiss		
				Floodlight	
c	Lithonia	USA	Lithonia		
			High Pressure Sodium Lantern		
d	Philips	Malaysia	Philips		
			SGP 338/250W and 400W		
e	Schreder	Malaysia	Schreder (JPE/BP/OSS/2007 (14))		
			High Sodium Lantern		

No (4.1.1)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Lantern	Floodlight	
f	Success Electronics & Transformer Manufacturer Sdn Bhd [23 January 2006]	Malaysia	Nikkon Street Lantern (JPE/BP/OSS/2004 (18))		Perusahaan Wadura
			Model HPS 250W S408 Model HPS 150W S438		
g	Success Electronics & Transformer Manufacturer Sdn Bhd [18 January 2012]	Malaysia	Success		Perusahaan Wadura
			1. Nikkon S419 (B) 150W, 2. Nikkon S419 (B) 250W		
h	Success Electronics & Transformer Manufacturer Sdn Bhd [23 November 2013]	Malaysia	Success		Perusahaan Wadura
			Nikkon S419 (B) 400W		

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

No (4.1.2)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	GE	Europe / USA	High Pressure Sodium	
b	Osram	Europe / China	High Intensity Discharge Lamps	
c	Philips	Holland / China	High Intensity Discharge Lamps	
d	GE	USA	Mercury Lamps	

4.1.3. STREET LIGHTING ACCESSORIES

No (4.1.3)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Ignitors	Ballasts	
a	APF	Italy	APF		
			Ignitors	Ballast for High Pressure Lamp	
b	Atco	Australia	Atco		
			Ignitors	Ballast for High Pressure Lamp	
c	Bagturgi	Switzerland	Bagturgi		
			Ignitors		
d	Layrton	Spain	Layrton		
				Ballast for High Pressure Lamp	
e	Luxram	Malaysia	Luxram		
				Ballast for High Pressure Lamp	
f	Nikkon	Malaysia	Nikkon		
			Ignitors	Ballast for High Pressure Lamp	
g	Philips	Holland / Netherland	Philips		
			Ignitors	Ballast for High Pressure Lamp	
h	Multi-Champs Sdn Bhd [25 July 2001]	Malaysia	Solex's Range of Lighting (JPE/BP/OSS/2001 (4))		Wah Fai Sdn Bhd
			(ii) Superimposed Ignitors (S1)	(i) High Pressure Sodium Vapour 70W, 100W, 150W, 250W & 400W Ballasts	
i	Teletronic	Europe	Teletronic		
			Ignitors		
j	Vossloh – Schwabe	Germany	Vossloh – Schwabe		
			Ignitors	Ballast for High Pressure Lamp	

No (4.1.3)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Ignitors	Ballasts	
k	Success Electronics & Transformer Manufacturer Sdn Bhd [22 March 2004]	Japan	Nikkon Ignitor and Ballasts (JPE/BP/OSS/2003 (14))		Perusahaan Wadura
			(i) Ignitors (Model - 9000, SP9003)	(ii) Sodium Ballast (Model.- HPS 70W, HPS 100W, HPS 150W, HPS 400W) (iii) Mercury Ballast (Model - HPMV 250W, HPMV 400W) (iv) Metal Halide Ballast (Model - MH 70W, MH 150W, MH 250W, MH 400W)	

4.1.4. PHOTOCELLS

No (4.1.4)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	KAGA	Japan		
b	Selcon	Japan		

4.1.5. LED STREET LIGHTING LANTERN

No (4.1.5)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Height	Rating / Model	
a	Ekosparks Company Pte Ltd [16 April 2018]	Singapore	Ecosparks® EVAN LED Street Lantern for Street Lighting		Letech Technologies
			12 Metres Height	210W (ESL-220-730-50*140)	
b	Ecosparks Company Pte Ltd [12 January 2019]	Singapore	Ecosparks® EVAN LED Street Lantern for Street Lighting (JPE/UP/EKOSPARKS/Singapore/LED St. Lantern/01/2019)		Letech Technologies
			10 Metres Height	210W (ESLA-210-730-50*140)	
c	Dongguan Kingsun Optoelectronic Co., Ltd [23 April 2018]	China	Kingsun-Apollo Series LED Street Lighting		L.K.H (B) Sdn Bhd
			12 Metres Height	RL2R1084 (180W)	
d	NYC Lighting Technology Corporation [21 April 2018]	China	NVC Belfrey LED Street Lighting for Street Lighting		DSC Engineering Sdn Bhd
			10 Metres & 12 Metres Height	180W	
e	Oversea Lighting & Electric (M) Sdn Bhd [2 August 2018]	Malaysia	OLE LED DURA ST for Street Lighting (JPE/UP/OLE/Malaysia/LED S/L (180W)/01/2018)		Perusahaan Wadura
			12 Metres Height	180W 5000K	
f	Oversea Lighting & Electric (M) Sdn Bhd [30 October 2018]	Malaysia	OLE LED DURA ST for Street Lighting		Perusahaan Wadura
			10 Metres Height	150W	
g	Philips Lighting Pte Ltd [2 August 2018]	Singapore	Philips Roadflair LED for Street Lighting (JPE/UP/PHILIPS/Singapore/LED S/L (200W)/01/2018)		Skyfield Engineering Company
			12 Metres Height	BRP393 240NW 200W 220-240V DWV	
h	Straits Design Sdn Bhd [18 December 2018]	Malaysia	SCHREDER LED Street Lantern for Street Lighting		Tasya Sdn Bhd
			10 Metres Height 12 Metres Height 10 Metres Height 12 Metres Height	TECEO 2 229W TECEO 196W AMPERA 245W AMPERA 213W	

No (4.1.5)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]		Local Agent
			Height	Rating / Model	
i	Unilumin Group Co. Ltd [21 October 2019]	China	LEDOLPHIN (JPE/JKPP/UNILUMIN(China)/Ledolphin-St.Lantern/01/2019)		Skyfield Engineering Company
			10 Metres Height	P8 (B) 180W	
			12 Metres Height	3535 (B) 180W	
j	Shanghai Fujing Lighting Technology Co., Ltd [1 Mar 21 – 1 Mar 24]	China	Fujing LED Street Light Lantern for Street Lighting (DES/PRC/Fujing/01/MoM1.21)		Syarikat Perusahaan Zaiba @ Adik - Adik
			10M Height 12M Height	180W (FJ-SL102-180W)	
k	Davex Engineering (M) Sdn Bhd [17 Nov 22 – 31 Oct 25]	Malaysia	DAVIS LED Street Lantern (DES/PRC/Davex/01/MoM5.22)		Letech Technologies
			12M Pole Height	Helio SLH5 200W	
			10M Pole Height	Helio SLH5 180W	
			8M Pole Height	Helio SLH3 80W	
l	Shenzhen Dianming Tech Co., Ltd [17 Nov 22 – 31 Oct 25]	China	Dianming LED Street Lantern (DES/PRC/Dianming/01/MoM5.22)		Lee Jong Electrical Co. Sdn Bhd
			12M Pole Height	G9 - 150W (DMSL - G9)	
m	Dongguan Ishinelux Technology Co., Ltd [25 Mar 23 – 31 Jan 26]	China	Ishinelux LED Street Lantern (DES/PRC/Dongguan/01/MoM2.23)		Le-Energy Solutions Sdn Bhd
			12M Height	Legend II (ISL-LDB) 200W	
n	Dongguan Ishinelux Technology Co., Ltd [10 Apr 24 – 30 Apr 27]	China	Ishinelux LED Street Lantern (DES/PRC/Dongguan/01/MoM2.24)		Le-Energy Solutions Sdn Bhd
			10M Height	Legend II (ISL-LDB) 180W	
o	Signify Singapore Pte. Ltd [4 Sep 23 – 24 Aug 26]	China	Philips (DES/PRC/Signify/01/MoM4.23)		Morsjaya Electrical Co Sdn Bhd
			12M Pole	Roadflair GEN II BRP 492 150W	
			10M Pole	Roadflair GEN II BRP 492 150W	
p	Shenzhen Dianming Tech Co., Ltd [28 Sep 24 – 26 Sep 27]	China	Dianming LED Street Lantern (DES/PRC/Dianming/01/MoM5.24)		Lee Jong Electrical Co. Sdn Bhd
			10M Pole Height	G9 - 150W (DMSL - G9)	
q	Unilumin Group Co., Ltd [13 Mar 25 – 4 Mar 28]	China	Unilumin Guppy LED Street Light (DES/PRC/Unilumin/01/MoM1.25)		Skyfield Sdn Bhd
			10M Pole 12M Pole	MIDI 150W UNI 891 MAXI 180W UNI 891	

## 5. BREAKERS, CONTACTORS, FUSE, FUSE LINKS & SWITCH DISCONNECTOR

### 5.1. BREAKERS AND CONTACTORS

No (5.1)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]			Local Agent
			Air – Circuit Breakers	Moulded Case Circuit Breakers	Contactors	
a	F & G	Germany	F&G			
b	Fuji Electric Co., Ltd [28 March 2000]	Japan	Fuji (JPE/BP/OSS/99 (28))			L.K.H (B) Sdn Bhd
				Magnetic Contactor and Starter		
c	Hager	France	Hager			
d	Hitachi	Japan	Hitachi			
e	Hwa Shih Electric Industrial Co. Ltd [1 December 2003]	Taiwan	REGIS (JPE/BP/OSS/2002 (42))			CE Industrial (B) Sdn Bhd
				NF100-MA 100A, NF250-MA 225A, NF400-HA 250A, 300A, 400A, NF600-HA 500A)		
f	Legrand	France	Legrand			

No (5.1)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]			Local Agent
			Air – Circuit Breakers	Moulded Case Circuit Breakers	Contactors	
g	Doepke Schaltgerate GMBH & Co. [11 November 2000]	Germany / Singapore	LEMAG Electrical Accessories (JPE/BP/OSS/1999 (25))			
			(i) Residual Current Circuit Breakers (RCCBs) (ii) Residual Current Control Devices (iii) RCCB / MCB Combinations (iv) Miniature Circuit Breakers (RCBs)			
h	LG Industrial Systems Ltd [29 January 2004]	Korea	LG Industrial (JPE/BP/OSS/2002 (24))			Ting Sii King Electrical Supplies Sdn Bhd
			1. Three Pole Air Circuit Breaker LBA-16S-3EC 1600A (65KA), LBA-32S 3150A (65KA), LBA-32S-3EC 3150A (85KA)	(i) Molded Case Circuit Breaker (ABE 403b, ABS 403b, ABH 403b, ABL 403b, ABE 803b, ABS 803b, ABL 803b, (ii) 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	3. Magnetic Contactor (GMC 100 & 125, GMC 150, GMC 150R, GMC 180, GMC 220, GMC 300, GMC 400, GMC 600, GMC 800)	
i	MEM	UK	MEM			
j	Merlin Gerin	France	Merlin Gerin			

No (5.1)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]			Local Agent
			Air – Circuit Breakers	Moulded Case Circuit Breakers	Contactors	
k	Mitsubishi	Japan	Mitsubishi			
l	Moeller	Germany / Austria	Moeller			
m	PDL	Australia	PDL			
n	Schrack	Austria	Schrack			
o	Schupa	Germany	Schupa			
p	Siemens	Germany	Siemens			
q	Square D	UK	Square D			
r	Telemecanique	France	Telemecanique			
s	Terasaki	Japan	Terasaki			

5.2. CUT-OUT FUSE AND SEALING CHAMBERS

No (5.2)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	BICC	UK		
b	W. Lucy [4 November 1998]	UK	(i) 11KV Volts SF6 Outdoor Ring Main Unit (ii) LV Mini Feeder Pillar (Up to 400A) (JPE/BP/OSS/1998 (36))	
c	WT - Henley	UK		

5.3. HRC FUSE LINKS

No (5.3)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	Bussman	UK		Harum Kejuruteraan
b	Hawker	UK		
c	Lawson	UK / India		

5.4. SWITCH - DISCONNECTOR

No (5.4)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	Jean Muller Gmbh Elektrotechnische Fabrik [13 Mar 21 – 1 Mar 24]	Germany	Jean Muller Fuse Switch – Disconnecter (DES/PRC/JeanMuller/01/MoM1.21)	TSK Sdn Bhd

## 6. ENGINES & ALTERNATORS

### 6.1. DIESEL ENGINES

No (6.1)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	Cummins	UK / USA		
b	Volvo	Sweden		

### 6.2. ALTERNATORS

No (6.2)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]	Local Agent
a	Leroy Somer	France / UK		
b	Mecc-alte	Italy		

## 7. METERS

No (7)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]				Local Agent
			1P	DC	3P	CT	
a	Shenzhen Star Instrument Co., Ltd [4 June 2011]	China	Star STS Prepayment Meter				Le-Energy Solutions Sdn Bhd
			DDSY23S		DTSY23S		
b	Shenzhen Star Instrument Co., Ltd [28 February 2018]	China	Star CT Operated Electronic Energy Meter Class 0.5s				Le-Energy Solutions Sdn Bhd
						DTS27 (3P4W)	
c	Shenzhen Star Instrument Co., Ltd [17 Nov 22 – 31 Oct 25]	China	STAR Smart Energy Meter (DES/PRC/Star/01/MoM5.22)				Le-Energy Solutions Sdn Bhd
			DDSY23S (1P2W)				
d	Shenzhen Star Instrument Co., Ltd [17 Nov 22 – 31 Oct 25]	China	STAR Smart Energy Meter (DES/PRC/Star/02/MoM5.22)				Le-Energy Solutions Sdn Bhd
					DTSY23S (3P4W)		
e	Shenzhen Star Instrument Co., Ltd [17 Nov 22 – 31 Oct 25]	China	STAR CT Energy Meter (DES/PRC/Star/03/MoM5.22)				Le-Energy Solutions Sdn Bhd
						DTS27 (3P4W)	
f	Shenzhen Star Instrument Co., Ltd [17 Nov 22 – 31 Oct 25]	China	STAR DC Energy Meter (DES/PRC/Star/04/MoM5.22)				Le-Energy Solutions Sdn Bhd
				1P2W DC Energy Meter			
g	VSD Automation Sdn Bhd [17 Nov 22 – 31 Oct 25]	Malaysia	Halley Smart Electricity Meter (DES/PRC/VSD/01/MoM5.22)				Beaver Engineering Sdn Bhd
			DDSD285 KWH		DTSD545 KWH		
h	Kamstrup A/S [2 Mar 23 – 31 Jan 26]	Denmark	Kamstrup Electrical Metering (DES/PRC/Kamstrup/01/MoM1.23)				Exceltech Solutions Sdn Bhd
			1P Smart		3P Smart	CT Smart	

No (7)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]				Local Agent
			1P	DC	3P	CT	
i	Conlog (Pty) Ltd [7 Mar 22 – 6 Mar 25]	South Africa	Conlog Meter (DES/PREC/Conlog/01/MoM3.22)				Engicons Sdn Bhd
			BEC44 80/100 Amps (Wired Type) WBEC44 80/100 Amps (Wireless Type)				
j	Merlin Gerin SA (PTY) Ltd [12 September 2007]	South Africa	Conlog Prepayment Electricity Meter (JPE/BP/OSS/2007 (06))				Threeg Media Sdn Bhd
			BEC23 PLT Prepayment Electricity Meter 10-80A & 20-100A		BEC33 MCU Prepayment Electricity Meter 10-80A & 20- 100A		
k	Conlog (Pty) Ltd		Conlog Meter				
					BEC 62 (100A) BEC33Hc (250A)		
l	Landis + Gyr Pte Ltd [4 June 2011]	South Africa	L+G				Letch Technologies
			10-GM046 Single Unit		10-3P012 Single Unit		
			10-EM08 Split Unit		10 3P012 Split Unit		
			10-PL004 PLC Split		10-3P206 PLC Split		
m	Landis + Gyr Pte Ltd [28 February 2018]	Singapore	L+G				Letch Technologies
			E350 Series Smart Meter ZCF110ABeFs2		E350 Series Smart Meter ZMF110ABeFs2		

No (7)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]				Local Agent
			1P	DC	3P	CT	
n	Landis + Gyr Pte Ltd [23 Dec 20 – 22 Dec 23]	Greece	Landis + Gyr (JPE/MINIT/UP/LGE650/LETECH/GREECE/2020 (07))				Letch Technologies
					E650 Series 3P4W Industrial & Commercial Meter Class 0.5s		
o	Landis + Gyr Pte Ltd [17 Nov 22 – 31 Oct 25]	Greece	Landis + Gyr (DES/PRC/L+G/03/MoM5.22)				Letch Technologies
					E850 Series Electricity Precision Meter		
p	Landis + Gyr Meters & System (Zhuhai) Co., Ltd [7 Mar 22 – 6 Mar 25]	China	Landis + Gyr (DES/PRC/L+G/01/MoM3.22)				Letch Technologies
					E550 Series Model 3 Phase Electricity Meter		
q	Landis + Gyr Pte Ltd [17 Nov 22 – 31 Oct 25]	Greece	Landis + Gyr (DES/PRC/L+G/04/MoM5.22)				Letch Technologies
					E650 Series Model		
r	Landis + Gyr Pte Ltd [17 Nov 22 – 31 Oct 25]		Landis + Gyr (DES/PRC/L+G/01/MoM5.22)				Letch Technologies
			E350 Series Model		E350 Series Model		
s	Landis + Gyr Pte Ltd [17 Nov 22 – 31 Oct 25]		Landis + Gyr (DES/PRC/L+G/02/MoM5.22)				Letch Technologies
					E570 Series Model		
t	KWHIQ B.V [3 Sep 24 – 20 Aug 27]	China	KWHIQ Electricity Meter (DES/PRC/KWHIQ/01/MoM4.24)				Fraser Inter Solutions Sdn Bhd
			IQ0102065br1 / MA105H2				

No (7)	Manufacturers [Approval Date]	Country of Origin	Product Brand / Description [Approval Reference]				Local Agent
			1P	DC	3P	CT	
u	KWHIQ B.V [3 Sep 24 – 20 Aug 27]	China	KWHIQ Indirect Poly Phase Meter (DES/PRC/KWHIQ/02/MoM4.24)				Fraser Inter Solutions Sdn Bhd
						IQCT440br1 / MA304T4E	
v	KWHIQ B.V [3 Sep 24 – 20 Aug 27]	China	KWHIQ Poly Phase Electricity Meter (DES/PRC/KWHIQ/03/MoM4.24)				Fraser Inter Solutions Sdn Bhd
					IQ0304085br1 / MA304H4E		

**Note:**

The quality and performance of equipment shall comply with the relevant international standards and satisfy the specifications set by DES as per the following Technical Specifications which can be purchased from Registration Unit at \$20.00 per document.

- 1) 600/1000V XLPE CABLE (DES/11kV/LVC) DATED 26/07/1997
- 2) 11kV NON EXTENSIBLE OUTDOOR RING MAIN UNIT (DES/11kV/RMU) DATED 26/07/1997
- 3) 11kV EXTENSIBLE OUTDOOR FIXED MODULAR SWITCHGEAR (DES/11kV/OSW) DATED 26/07/1997
- 4) 11kV/433 TRANSFORMER (DES/11kV TFR) DATED 26/07/1997
- 5) OUTDOOR TYPE LV DISTIRBUTION FEEDER PILLAR (DES/11kV/DFP) DATED 08/10/1997
- 6) 11/11kV TRANSFORMER (DES/11kV/TRF/IB) DATED 01/03/1999
- 7) ELECTRICAL CONCRETE POLE & ACCESSORIES (DES/11kV/DP) DATED 01/03/1999
- 8) 12kV DOUBLE BUSBAR METALCLAD SWITCHGEAR (DES/11kV/MSG/DB) DATED 01/03/1999
- 9) LV AERIAL BUNDLE CONDUCTOR (DES/LVC/ABC) DATED 01/08/2000
- 10) 12kV METALCLAD SWITCHGEAR (DES/11kV/MSG - REV. 1) DATED 25/04/2000
- 11) PVC/SWA/PVC LV CABLE (DES/PVCSWAPVC/LVC) DATED 20/03/2001
- 12) HV UNDERGROUND CABLE (DES/11kV/HVC - REV. 0) DATED 26/07/1997
- 13) 66kV UNDERGROUND CABLE (DES/66kV UNDERGROUND CABLE - REV. 1) DATED 1/5/2012
- 14) 25-30 MVA STEP DOWN POWER TRANSFORMER (DES/66KV/PTRF) DATED 15/8/2000
- 15) 66kV TRANSMISSION LINE SURGE ARRESTER (TLSA) (DES/66KV/TLSA REV. 0) DATED 12/12/2024