



**SYSTEM PROTECTION & MAINTENANCE SDN BHD**

(126032-D)

*Towards Engineering Excellence*



*Delivering Quality and Perfection*

**SUBSIDIARIES**



# MISION

We are committed to continuously provide quality services safely and profitably meeting our business objectives as well as satisfying the needs of our clients, employees and shareholders whilst making positive contributions to the society.



# VISION

To be an established EPCC Contractor in the Power and Oil & Gas Sectors and Owner/Operator of Renewable Energy Power Plants providing comprehensive and reliable products and services for the industry within ASEAN by year 2025.



# FROM CEO'S DESK

Being in the power industry has been a challenge for us in System Protection & Maintenance Sdn Bhd (SPMSB). Over the years SPMSB has evolved in this industry and will continue to do so in this familiar field from where we started. With our presence in the past three decades, we are very proud with what we do, taking honor in every project delivery, be it in the quality of service or the project completion, we strive to work at our best to offer our services to the industry.

Back in 1984, SPMSB was set up with very minimum staff on board, where every hard work, every contribution and every penny was very limited at the time. Having set up at times where there were very few locals in the industry, we struggled to convince our capabilities and potential in undertaking each job we secured. The outcome is what we are today, from initially just offering testing and commissioning works, we have now become a full Engineering & Construction contracting company or EPCC for transmission substations (up to 500kV) power plants and other industries.

The foundation to our business throughout the years remain, regardless of our size, that is to understand and satisfy clients' requirements for workmanship, on time delivery, safety and value for money in the services we provide. Overcoming challenges and transforming them into opportunities has been the hallmark of SPMSB. Having gone through various challenges from the financial crisis to the evolving technology, we overcome these glitches in ensuring the existence of SPMSB continue.

With the current workforce, supported by long-service and dedicated personnel, we make every avenue for business a possibility for our growth. Our trained and technically qualified personnel, are well equipped with the capabilities to embark on large turnkey projects in the power and other industries such as the oil & gas, manufacturing and maritime/marine ports.

With our excellent track record as a one-stop Power Contractor especially with the major players in Malaysia, like TNB and Petronas, we have diversified our range of services to participate in projects from other sectors and scope of services such as Electrical & Instrumentation, Civil, Maintenance and Renewable Energy. We believe it is our destiny to evolve into a world-class Power Contractor with international market presence such as the Middle East, North Africa or ASEAN countries.

***"Towards Engineering Excellence"***

**Dato' Ir Hj Mohd Zaini Abdullah**  
Group Chairman  
System Protection & Maintenance Sdn. Bhd.

# COMPANY DIRECTORS & MANAGEMENT TEAM

## **DATO' IR HJ MOHD ZAINI ABDULLAH** Group Chairman

Since the founding of SPM in 1984, Dato' Zaini has expanded its overall capabilities to become one of the preferred engineering services company in the industry. Through his broad experience in the industry, from LLN (now TNB) to Perwaja, Dato' Zaini has led the SPM group of companies towards a complete power-business organisation, capable of EPCC on Generation, Transmission & Distribution of electricity. Dato' Zaini is a member of the Institute of Engineers, Malaysia (MIEM) and a Certified Professional Engineer of the Board of Engineers Malaysia (P.Eng.). He is also certified as a Competent Service Engineer (up to 500kV rating) by JBEG Malaysia and Energy Commission of Malaysia. Dato' Zaini holds a B.Sc.(Hons) in Electrical Engineering from University of Brighton, U.K



## **NORMAN AWALLUDIN** Chief Operating Officer

Norman joined SPM in June 2003. He is a registered Graduate Engineer with Board of Engineers Malaysia (BEM) and Institution of Engineers Malaysia (IEM). He is appointed to the SPM Board as Executive Director and is now appointed as the Chief Operating Officer. He is responsible for overall operation within SPM Group besides overseeing the operation of subsidiaries, Testcom Services Sdn. Bhd. (TCS), SPM Engineering and Construction Sdn. Bhd. (SPMEC) and Civil Department. Mr. Norman has a Bachelor's Degree in Electrical Engineering from University of Pittsburgh, USA.



### **MOHD KHASAN AHMAD**

Executive Director

- Oil & Gas

Mohd Khasan joined the SPM Board in mid-2008. He graduated from Universiti Teknologi MARA with degree in Accountancy. He is a member of the Malaysian Institute of Accountants. He served in Bank Negara Malaysia for a period of about 7 years from 1986, the last 2 years of which he was seconded to the Capital Issues Committee as its Principal Assistant Secretary. Subsequently, he joined the Securities Commission in 1993 for a period of about 5 years and his last capacity was an Assistant Manager in its Issues and Investment Division. During the tenure of his above appointments, he was involved in reviewing various corporate exercises, ranging from initial public offerings, mergers and acquisitions, reverse take-overs, issuance of bonds and other capital raising exercises. Encik Mohd Khasan left the Securities Commission and joined the private sector in 1997. He currently sits on the Boards of Crest Builder Holdings Berhad, Homeritz Corporation Berhad, Sinmah Capital Berhad and Mexter Technology Berhad as Independent Non-Executive Director. He also sits on the Board of several other private limited companies.

### **AB RAZAK MUSTAFFA**

Project Director

- Transmission & Distribution

Ab Razak joined SPM in 2017 as Project Director having 30 years of experience in the energy industry. Ab Razak started his career in 1988 as construction engineer in TNB where he spent 13 years before moving up in his career as GM of Transmission Technologies Sdn. Bhd a subsidiaries of MRCB and later as COO of Mahkota Technologies Sdn. Bhd. Having experience in various aspect of energy industry in particular T&D, Ab Razak is leading T&D Division where he responsible for engineering, procurement and construction until commission of all project under SPM both locally and internationally. He holds a BSC (Hons) in Electrical Engineering and Minor in Mathematics from University of Missouri, USA.



### **WAN AZLINA MOHD ZAINI**

Executive Director

- Finance, General & Support Services

Upon graduating in 2002 with a Masters Degree in Computer and Communications Engineering from University Kebangsaan Malaysia, Bangi, Wan Azlina joined SPM and was assigned to be in charge of TOLS, a subsidiary newly set up then. She was later appointed as Executive Director of General Affairs and Support Services in 2006, where she was responsible for Admin, HR, Procurement, Finance and Quality for SPM and the group. Now, besides maintaining the existing role held above, she is also responsible for the Solar division and is one of the qualified SEDA photovoltaic installation designer for the company.

### **MOHD YUSOF MAAROF**

Project Director - Oil & Gas

Mohd Yusof joined System Protection & Maintenance Sdn Bhd (SPMSB) in 2009 as a Project Director to manage and oversee Oil and Gas Division. Then, he was transferred to the company subsidiary, SPM Energy Sdn Bhd which cater for oil and gas businesses. With his 43 years of experiences involved in Construction Engineering and Maintenance works in oil and gas sector, he was assigned to manage the overall operations of the company. Previously, he served a few oil and gas companies such as Sarawak Shell Berhad, MMC Berhad, MMHE Berhad, PSC Berhad, Shapadu Sdn Bhd and Offshore Work Construction & Engineering Sdn Bhd. He holds a B.Sc (Hons) in Mechanical Engineering from United Kingdom (UK).



# CORPORATE INFORMATION

## HEAD OFFICE ADDRESS

No. 17 & 19, Jalan Astaka U8/83,  
Bukit Jelutong Business &  
Technology Centre,  
40150 Shah Alam,  
Selangor Darul Ehsan  
MALAYSIA

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E: [info@spm.com.my](mailto:info@spm.com.my)

**MALAYSIA BUSINESS  
REGISTRATION NO.**  
126032-D

## REGISTRATION DETAILS

Date/Place of Incorporation  
28 August 1984/ Kuala Lumpur

## COMPANY SECRETARY

ECC Consulting Sdn Bhd  
No. 54, Mezzanine Floor  
Jalan SS21/58, Damansara Utama  
47400 Petaling Jaya, Selangor  
MALAYSIA

## COMPANY AUDITOR

Leslie Yap & Co  
No.54, 1st Floor,  
Jalan SS21/58, Damansara Utama  
47400 Petaling Jaya, Selangor  
MALAYSIA

## BRANCH OFFICE MALAYSIA BRANCH OFFICE

Sabah  
Lot No. F-4-9, 4th Floor,  
Block F Plaza Tanjung Aru,  
Jalan Mat Salleh  
88100 Tanjung Aru,  
Kota Kinabalu

T: +(60)8-8319 100  
F: +(60)8-8319 102

## BANKERS

CIMB Bank Berhad  
Ambank Berhad  
Malayan Banking Bhd  
RHB Bank Berhad  
Bank Islam Malaysia  
Berhad  
United Overseas Bank  
(M) Bhd.  
SME Bank Malaysia

## CAPITAL

Authorised Capital  
RM

**25 Million**

Paid-up Capital  
RM

**10 Million**



## ABOUT US



Being one of the pioneers in electrical engineering and construction for the power industry, System Protection & Maintenance Sdn. Bhd. (or “SPMSB”) is now among the leading EPCC company in Malaysia for electrical installations in Power Plants, Sub-Stations, Oil & Gas and Industrial facilities. Since its inception in 1984, SPM has secured and successfully completed sizeable contracts within Malaysia and overseas.

As a fully bumiputra player in the industry, SPMSB holds tightly to the mission “We are committed to continuously provide Quality services safely and timely” as the fundamental principle to all its project execution to ensure the satisfaction of all interested parties are met. SPMSB’s determination and persistence, is an essential mechanism into realizing its vision that is “To be an established EPCC Contractor in the Power, Oil & Gas Sector, and Owner/Operator of Renewable Energy Power Plants within ASEAN by 2025.

In ensuring delivery of quality services, upkeeping and maintaining the company’s ISO 9001 “Quality Management System” is a critical aspect SPMSB pays attention to. SPMSB is proud to have been certified to ISO 9001 quality management system since 2004, and has recently updated to the latest ISO 9001:2015 incorporating risk management within the system.

For the past years, SPMSB has established impressive track records in the power industry with the national power utility Tenaga Nasional (TNB), along with Petronas and other electrical majors such as ABB, Siemens, Hyundai, Alstom, Areva, Samsung and Toshiba. SPMSB now, is not only a one stop turnkey contractor for Utilities needs, it is also a proud developer and a co-owner of a 20 MW Hydro Power Plant in Aceh, Indonesia which is scheduled to be in operation by end of 2018.



Janamanjung 3x700MW and 3 x 350 MW Coal Fired Power Plant, Tanjung Bin 3x700MW and 1000MW Coal Fired Power Plant and Jimah 2x700MW and 2x 1000MW Coal Fired Power Plant are among the marquee of SPMSB's success stories. In Transmission & Distribution, SPMSB has completed numerous Sub-Station projects for both the conventional Air-Insulated Switchgear (AIS) and Gas-Insulated Switchgear (GIS), in the range of 132kV, 275kV up to 500kV.

In the Oil & Gas, SPMSB has undertaken E&I projects both off-shore and on-shore. SPMSB is currently completing three packages for the RAPID project in Pengerang which consists of Construction and Commissioning of the Main Substation, Construction and Commissioning of Unit substations for Utilities, Interconnecting and Offsite Facilities, and finally Construction and Commissioning of 33kV and below Distribution Substation Feeder Cable Laying, Jointing and Termination at Gas Insulated Substation (GIS) for Utilities, Interconnecting and Offsite Facilities.



In the Civil sector, SPMSB has taken a step further to form its own civil construction team and is now completing the Klang Valley Mass Rapid Transit Phase 2 project as a subcontractor to Work Package Contractor, Sunway Construction Sdn Bhd. SPMSB was awarded with two civil packages that is, Construction of substation and utilities building for Sri Damansara West Station and Construction of Sri Damansara East Elevated Main Passenger Station.

Overseas presence of SPMSB was solidified by the completion of Electrical & Instrumentation works for the Bashayer-2 Oil Marine Terminal in Sudan and the complete-installation Electrical & Instrumentation works for the 3x25MW Gas Turbine Power Station at the Al-Jalamid Phosphate Mine Complex in Saudi Arabia.

As the power industry progresses into its stability, SPMSB is also eyeing into projects in the Renewable Energy, with focus on niche segments of Power Generation by Solar, Run-Of-River Mini Hydro, Biomass and Biogas. SPMSB has now also developed its Civil Construction wing to complement its range of services as a complete turnkey contractor with full in house capabilities. SPMSB is confident with the future outlook of the company and its progress in new ventures.





# OUR SERVICES

## **POWER GENERATION TRANSMISSION AND DISTRIBUTION**

- Design and Supply of Generation, Transmission and Distribution System
- Electro-Mechanical Construction Pre-Operational Testing, Start Up and Commissioning
- Plant/Equipment Rehabilitation
- Load Dispatching, Power Distribution and Supervisory Control System
- Operation and Maintenance

## **TESTING AND CALIBRATION**

- Protection Relay Testing, Electronics Testing and Instrument Calibration
- Protection Scheme Design, Evaluation and Troubleshooting
- Retrofitting and Recommission of Low, Medium and High Voltage Equipment
- Retrofitting and Replacement of Protection Relays
- Testing and Verification of Generators, Transformers, Air Insulated Switchgear, Gas Insulated Switchgears, Switchboards
- Testing and Commissioning of Auto Transformer, Power Transformer and Earthing Transformer
- Conformation Test for Operation and Stability Scheme Electrical Power Substation
- High Voltage Dielectric Test for 275/132/33/11kV Gas Insulated Busbar and 33/11kV Power Cable
- Testing and Commissioning of 220/110V DC Battery Supply for Power Substation, 275/132kV Transmission Line Test, Solar Plant and Hydro Plant

## **OIL AND GAS INDUSTRY**

- E&I Onshore/Offshore Inspection, Calibration, Maintenance and Upgrading works
- Calibration of voltage, current and resistance equipments
- Alarm Shutdown (ASD), Fire and Gas (F&G) and Distributed Control System (DCS) upgrading works
- Lightning, Surge Protection and Cathodic Protection System works
- E&I Hook up and Commissioning works
- Mechanical and Piping project management
- Supervisory Control and Data Acquisition system (SCADA)
- Programmable Logic Control, Base Motor Control Centre & System Controller
- HVAC System, Building Automation and Environment Control System
- Boiler, Pressure Vessel Control and Burner/Temperature Control System
- Power Management and Generators, Transformers, Switchgears and Isolator
- Pressure Vessel, temperature & flow instrument calibration
- Schedule Shutdown maintenance for offshore platform and refineries
- On shore/Off shore service and maintenance of protection relays and electrical faults on cables and other electrical equipment
- Tank Work and Refurbishment

# OUR SERVICES

## CONSTRUCTION & INSTALLATION WORKS

- Installation of complete set of Generator Transformer, HV & LV Power Transformer, Capacitor Banks, Cast Resin Type Transformers and its accessories
- Installation of Insulated Phase Busbar including welding of the busbars
- Installation of 11kV up to 275kV Gas Insulated Busbar Switchgears
- Installation of 11kV up to 500kV Air Insulated Switchgears
- Installation of Control and Relay Panels, Earth Grid System, UPS, Battery Charger and Batteries, LVAC Board, Main Switch Board and Emergency Diesel Generator
- Laying and Termination of MV and LV Power Cable and Control/Instrument Cable
- Construction of cable ladder, cable tray and support structures

## TRANSFORMER OIL TESTING LABORATORY & SERVICES

- Laboratory Insulating Oil Analysis including diagnostics and follow up recommendations for new and in service transformers
- Transformer Condition Monitoring and Diagnosis Management
- Transformer Fault Identification through laboratory analysis
- Transformer Maintenance includes leak rectification and parts replacements
- Transformer Oil Purification and Regeneration Carried out Online and Offline
- Transformer Oil Reinhibition and Repassivation Carried out Online and Offline





## CIVIL CONSTRUCTION

- Site Pre-Construction and Infrastructure Works includes Mappings, Survey Demarcations, Soil Investigations, EIA Assessment, Land Clearing, Earthworks, Rock Excavation, Soil Replacement, Soil Stabilization and Improvement, Marine Reclamation and Coastal Defences, Retaining Walls and Erosions Mitigation, Embankments.
- River and Marine Fabrication Yards and Storage Logistics including Ballast Wharfs, Jetties, Skid-Beams, Workshops, Warehouses and Laydown Facilities
- Integrated Workers Camp
- Highways and Roadworks including Elevated Structures and Viaducts.
- Buildings includes Commercial, Campuses, Schools, Apartment Complex, Office Buildings, Multi-Storey Parking
- Civil Infrastructure, Buildings, Water and Sewerage Utilities for Power Stations, Factories, Warehouses and Port Logistics, Airports Logistics, Public Land Transport Facilities such as MRT, LRT.
- Preventive and Regular Maintenance in Buildings, Utilities and Infrastructure.
- Slope Rehabilitation and Retaining Walls
- Drainages





#### **SERVICES AND MAINTENANCE WORKS**

- Complete overhaul, major inspection & maintenance of various types of Transformers including Generator Step Up Transformer, Excitation Transformer and Unit Auxiliary Transformers
- Complete servicing, oil filtration and oil replacement of Transformer oil of sized up to 250MVA Single Phase Transformer
- Inspection and services on Isolated Phase Bus (IPB) Ducts and 11 kV Non-segregated Phase Bus (NPB) ducts
- Rehabilitation of Rectifier Plant for Electrolyzes
- Routine maintenance of Tap Changer, Transformer Protection Devices, Cable Boxes
- Servicing and replacement of Gas Insulated Switch Gear (GIS) of up to 275kV

#### **RENEWABLE ENERGY HYDRO, SOLAR, AND BIOGAS**

- Identification of potential sites, conducting feasibility studies with proposed outline of design for the power generating plant. This includes mini hydro, biogas, biomass and solar with a capacity in the range of 10 to 30MW.
- Seeking consent on environmental approvals, with detailed evaluation on preservation of nature at proposed sites.
- Complete proposal on design and engineering of Grid Connected Photovoltaic (GCPV) system, Off Grid Photovoltaic(OGPV) system and Net Energy Metering (NEM) for residentials, industries and large scale solar plant including Interconnection Facilities to grid (if applicable).
- Engineering, Procurement, Construction and Commissioning (EPCC) of power generating system. Procurement of major items for the generating plant includes hydro and gas turbines, photovoltaic panels and inverters, transformers and other balance of plant equipment.
- Construction and Installation includes Civil construction works, followed by Mechanical and Electrical installation works.
- Testing and Commissioning of the power generating system.
- Operation and Maintenance of installed power generating plant, which includes routine maintenance, troubleshooting, fault investigation, rectification and recommissioning of the system.

# SPM BUSINESS UNITS



Project Management & Construction  
Ab Razak Mustafa,  
Project Director



Civil/Hydro  
Norman Awalludin,  
Chief Operating Officer



Finance, General & Support Services & Renewable Energy,  
Wan Azlina Mohd Zaini,  
Executive Director

## GROUP SUPPORT SERVICES



Admin/Human Resource/  
Purchasing & IT  
Zainal Tukirin, Manager



Finance & Accounts  
Mohyidin Faisol,  
Senior Manager

## SUBSIDIARIES



Norman Awalludin,  
Managing Director



Mohd Yusof Maarof,  
Project Director



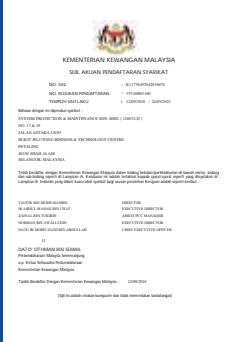
Wan Azlina Mohd Zaini,  
Managing Director



## Other BUSINESS UNITS



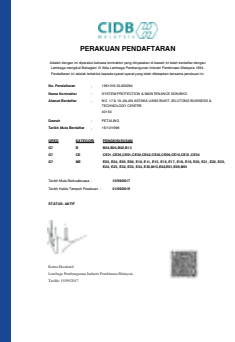
# QUALIFICATION & REGISTRATION



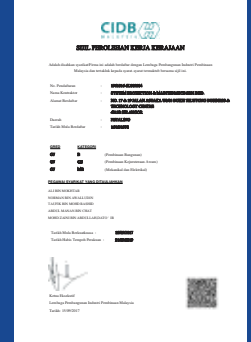
**KEMENTERIAN KEWANGAN MALAYSIA**



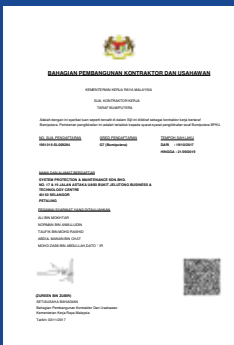
**KEMENTERIAN KEWANGAN MALAYSIA**  
(Taraf Bumiputera)



**LEMBAGA PEMBANGUNAN INDUSTRI PEMBINAAN**



**LEMBAGA PEMBANGUNAN INDUSTRI PEMBINAAN**  
(Sijil Perolehan Kerja Kerajaan)



**BAHAGIAN PEMBANGUNAN KONTRAKTOR DAN USAHAWAN**  
(Taraf Bumiputera)



**SUSTAINEABLE ENERGY DEVELOPMENT AUTHORITY**  
(SEDA - Service Provider)



**SURUHANJAYA TENAGA**  
(Kontraktor Elektrik)



**SURUHANJAYA TENAGA**  
(Kontraktor Perkhidmatan Elektrik)  
Registered under Testcom Services SB



**SIRIM GAS INTERNATIONAL**  
ISO 9001:2015

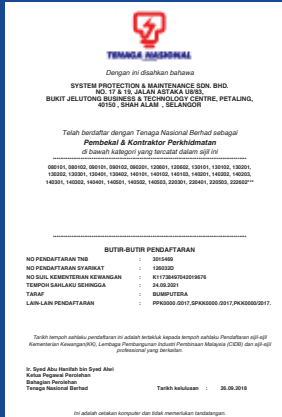


**IQNET**

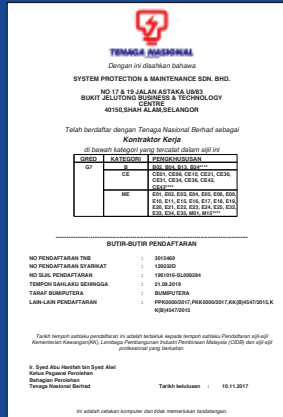


**MS ISO/IEC 17025:2005**  
(Transformer Oil Lab & Services Sdn Bhd)

# VENDOR REGISTRATION



**TENAGA NASIONAL BERHAD**  
Pembekal & Kontraktor  
Perkhidmatan



**TENAGA NASIONAL BERHAD**  
Kontraktor Kerja



**TENAGA NASIONAL BERHAD**  
Panel Kontraktor



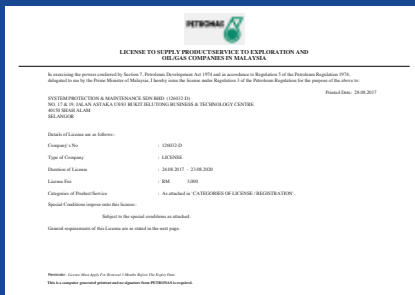
**SABAH ELECTRICITY SDN. BHD**  
Pembekal & Kontraktor  
Perkhidmatan



**SABAH ELECTRICITY SDN. BHD**  
Kontraktor Kerja



**SABAH ELECTRICITY SDN. BHD**  
Pembekal & Kontraktor  
Perkhidmatan  
(Testcom Services SB)



**PETROLIAM NASIONAL BERHAD**  
Petronas



**MALAYSIAN AIRPORT HOLDINGS BERHAD**



**KERETAPI TANAH MELAYU BERHAD**  
Pembekal & Kontraktor  
Perkhidmatan

# TRACK RECORD



**PMU KL (NORTH) 275/132/33kV GIS**  
Supply/ install & commission for 275/132/33kV GIS Substation and associate civil work



**PMU SENAI HI-TECH 132/33kV AIS**  
Supply/ install & commission for 132/33kV Substation and associate civil work



**PMU SETIA ALAM 132/33kV AIS**  
Supply/ install & commission for 132/33kV Substation and associate civil work



**TEMBAT HYDRO POWER PLANT**  
Electrical & Mechanical works for 2 x 7.5MW Tembat Hydro



**JIMAH POWER PLANT**  
Electrical & Instrumentation works for 2x700MW (2007) and 2x1000MW (2018) Coal Fired Power Plant



**JIMAH EAST 500kV AIS**  
Erection and testing works for 500kV Jimah East AIS Switchyard



**MANJUNG POWER PLANT**  
Cable-Laying & Termination for 1x1000MW (2014) and Electrical & Instrumentation works for 3x700MW (2003) Coal Fired Power Plant



**MANJUNG POWER PLANT**  
Major Service of 1050 MVA Generator Transformer



**TANJUNG BIN POWER PLANT**  
Electrical and instrumentation work for 3x700MW (2006) and 1000MW (2016) Coal Fired Power Plant



**PMU PERMAS JAYA 275/132kV**  
Testing & Commissioning of 2x275kV Overhead Line Feeder



**LABORATORY SERVICES**  
Testing of Transformer Oil for New and In-Service Transformer



**MRT LALUAN 2: SUNGAI BULOH SERDANG-PUTRAJAYA (SSP)**  
S201: Construction of elevated stations and substations and other associated works at Damansara Damai, Sri Damansara West, TPSS4, TPSS5, substations, Damansara Damai utilities building and Sri Damansara East Main Station





**PETRONAS P14-1001 RAPID, PENGERANG**  
Construction and Commissioning (CC) of 275kV GIS Electrical Equipment Installation



**PETRONAS P14-1200 RAPID, PENGERANG**  
Construction and Commissioning (CC) of 33kV and Below Distribution Substation Feeder, Cable Laying, Jointing and Termination at Gas Insulated Substation (GIS)



**PMU SUBANG TOWN CENTRE 275/132/33KV GIS**  
Installation and Testing works of 275/132/33kV GIS at PMU Subang Town Centre



**PMU SERDANG 132/33/11KV**  
Transformer oil regeneration and reinhibition services carried out online at PMU Serdang



**PMU PAPAN 275/132KV**  
Rehabilitation works for 275/132kV Papan including associate civil work



**PMU TAPAH 275KV**  
Establishment of 275kV Tapah Substation, including associate civil work



**CHENDEROH HYDRO POWER PLANT**  
Refurbishment of 11.5MVA Generator step up Transformer



**KRUENG ISEP, ACHEH, INSONESIA**  
Engineering, Procurement and Construction works for 20MW Run of River Hydro Power Plant



**GAS PROCESSING PLANT 2 (GPP2), TERENGGANU**  
Tank Refurbishment works for Petronas plant Rejuvenation and Revamp 2



**GAS PROCESSING PLANT 4 (GPP4), TERENGGANU**  
Tank Internal & External Refurbishment Works



**AL-JAL AMID (SAUDI ARABIA)**  
Mechanical, Electrical & Instrumentation works For 3x25MW Gas turbine Power Station & Substation



**BASHAYER-2, SUDAN**  
Electrical & Instrumentation works For Bashayer-2 Oil Export Marine Terminal

# AWARDS



**CERTIFICATE OF ACHIEVEMENT**  
SIME Semcorp Engineering Sdn. Bhd.



**SIJIL PENGIKHTIRAFAN**  
MeCD



**ACHIEVEMENT OF 1,000,000 MAN-HOURS WITHOUT LTI**  
TOS Energy



**1ST PRIZE WINNER FOR HSE BANNER COMPETITION**  
Sime Darby



**ANUGERAH KONTRAKTOR TERBAIK**  
Kementerian Kerja Raya Malaysia



**CERTIFICATE OF APPRECIATION**  
Tenaga Switch Gear SB



**FOCUSED RECOGNITION**  
Petronas  
Site: Pengerang (RAPID)





**SYSTEM PROTECTION & MAINTENANCE SDN BHD**



 **SPM GROUP**



**SYSTEM PROTECTION & MAINTAINANCE SDN BHD**

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**MALAYSIA BRANCH OFFICE**

**Sabah**

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88100 Tanjung Aru. Kota Kinabalu

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**F:**+(60)8-8319 102



## QUALIFICATION & REGISTRATIONS

NO	ORGANIZATION	CLASS	HEAD	SUB-HEAD	REG.NO
1	KEMENTERIAN KEWANGAN MALAYSIA			080101, 080102, 090101, 090102, 090201, 120601, 120602, 130101, 130102, 130201, 130202, 130301, 130401, 130402, 140101, 140102, 140103, 140201, 140202, 140203, 140301, 140302, 140401, 140501, 140502, 140503, 220301, 220401, 222602, 220503	357-00003160
2	KEMENTERIAN KEWANGAN MALAYSIA - (TARAF BUMIPUTERA)				357-00003160
3	LEMBAGA PEMBANGUNAN INDUSTRI PEMBINAAN.	G7	B	B02, B04, B13, B24	1961016-SL009284
		G7	CE	CE01, CE06, CE10, CE21, CE30, CE31, CE34, CE36, CE42, CE43,	
		G7	ME	E01, E02, E03, E04, E05, E06, E09, E10, E11, E15, E16, E17, E18, E19, E20, E21, E22, E23, E24, E25, E32, E33, E34, E35, M01, M15	
4	LEMBAGA PEMBANGUNAN INDUSTRI PEMBINAAN. - SIJIL PEROLEHAN KERJA KERAJAAN	G7	B	Pembinaan Bangunan	1961016-SL009284
		G7	CE	Pembinaan Kejuruteraan Awam	
		G7	ME	Mekanikal dan Elektrikal	
5	BAHAGIAN PEMBANGUNAN KONTRAKTOR DAN USAHAWAN (TARAF BUMIPUTERA)	G7			1961016-SL009284
6	SUSTAINABLE ENERGY DEVELOPMENT AUTHORITY (SEDA)				SEDA-RPVSP- 2018/082
7	SURUHANJAYA TENAGA (KONTRAKTOR ELEKTRIK).	A			ST(TKL) SGR/C/ KE/00109
8	SURUHANJAYA TENAGA (KONTRAKTOR PERKHIDMATAN ELEKTRIK) (REGISTERED UNDER TESTCOM SERVICES SB)	500kV ke atas			ST(TKL) SGR /C/ KPE/00047
9	SIRIM QAS INTERNATIONAL.			MS ISO 9001:2015 Management Systems-Requirements: Engineering, Procuments, Construction, Testing & Commissioning of Electrical Power Transmission Works	QMS 01262
10	IQNET			MS ISO 9001:2015 Management Systems-Requirements: Engineering, Procuments, Construction, Testing & Commissioning of Electrical Power Transmission Works	MY-QMS 01262
11	STANDARDS MALAYSIA (TRANSFORMER OIL LAB & SERVICES SDN. BHD.)			ISO/IEC 17025:2017 Scope of Testing: Chemical Materials/Products Tested: Mineral Insulating Oil	SAMM 427



## QUALIFICATION & REGISTRATIONS

NO	ORGANIZATION	CLASS	HEAD	SUB-HEAD	REG.NO
1	TENAGA NASIONAL BERHAD - PEMBEKAL & KONTRAKTOR PERKHIDMATAN.			080101, 080102, 090101, 090102, 090201, 120601, 120602, 130101, 130102, 130201, 130202, 130301, 130401, 130402, 140101, 140102, 140103, 140201, 140202, 140203, 140301, 140302, 140401, 140501, 140502, 140503, 220301, 220401, 222503, 222602	3015469
2	TENAGA NASIONAL BERHAD - KONTRAKTOR KERJA	G7	B	B02, B04, B13, B24	3015469
		G7	CE	CE01, CE06, CE10, CE21, CE30, CE31, CE34, CE36, CE42, CE43	
		G7	ME	E01, E02, E03, E04, E05, E06, E09, E10, E11, E15, E16, E17, E18, E19, E20, E21, E22, E23, E24, E25, E32, E33, E34, E35, M01, M15	
3	TENAGA NASIONAL BERHAD - PANEL KONTRAKTOR				
4	SABAH ELECTRICITY SDN. BHD - PEMBEKAL & KONTRAKTOR PERKHIDMATAN.			080101, 080102, 090101, 090102, 090201, 120601, 120602, 130101, 130102, 130201, 130202, 130301, 130401, 130402, 140101, 140102, 140103, 140201, 140202, 140203, 140301, 140302, 140401, 140501, 140502, 140503, 220301, 220401, 222602, 220503	SESB/P/VT/002/111
5	SABAH ELECTRICITY SDN. BHD - KONTRAKTOR KERJA (SPM)	G7	B	B02, B04, B13, B24	SESB/P/VT/002/111
		G7	CE	CE01, CE06, CE10, CE21, CE30, CE31, CE34, CE36, CE42, CE43,	
		G7	ME	E01, E02, E03, E04, E05, E06, E09, E10, E11, E15, E16, E17, E18, E19, E20, E21, E22, E23, E24, E25, E32, E33, E34, E35, M01, M15	
6	SABAH ELECTRICITY SDN. BHD - PEMBEKAL & KONTRAKTOR PERKHIDMATAN (Testcom Services SB)			220504	SESB/P/VT/002 /2935
7	PETROLIAM NASIONAL BERHAD - PETRONAS.			SE1010100, SE1010200, SE1010300, SE1010400, SE1010500, SE1010603, SE1010701, SE1010704, SE1010705, SE1010800, SE1011000, SE1011100, SE1011200, SE1011301, SE1011302, SE1011400, SE1011500, SI2020100, SI2030100, SI2030300, SI2050200, SI2050300, SI2050400, SI2050500, SO2020102, SO2020203, SO2020300	126032-D
8	MALAYSIAN AIRPORT HOLDINGS BERHAD.			S009001000, S009002000, S009003000, S009004000, S009005000, S009006000, S00900700, S009008000, S009009000, S011002000, V005002000, V008001000, V008002000, V008003000, V008004000, V008005000, V008006000, V008007000, V008008000, V008009000, V012001000, V012003000, V012004000	14161
9	KERETAPI TANAH MELAYU BERHAD - PEMBEKAL & KONTRAKTOR.			080101, 080102, 090101, 090102, 090201, 120601, 120602, 130101, 130102, 130201, 130202, 130301, 130401, 130402, 140101, 140102, 140103, 140201, 140202, 140203, 140301, 140302, 140501, 140502, 140503, 220301, 220401, 220503	0266-17
		G7	B	B02, B04, B13, B24	
		G7	CE	CE01, CE06, CE10, CE21, CE30, CE31, CE34, CE36, CE42, CE43	
		G7	ME	E01, E02, E04, E05, E06, E08, E09, E11, M01, M15	
10	SURUHANJAYA PERKHIDMATAN AIR NEGARA		5(2)	Permit IPA Jenis A/B/C/D/E	SPAN/EKS/(PT)/ 800-2C/2/17/594



SUMMARY OF PROJECTS COMPLETED

NO	PROJECT DESCRIPTION	NO. OF CONTRACTS	CONTRACT VALUE (RM MILLION)
1	Turnkey Works for 132kV, 275kV & 500kV AIS Substations (Design, Supply, Erect, Testing and Commissioning)	21	486 M
2	Turnkey or EPCC Scopes for 132kV & 275kV GIS Substations	14	308 M
3	Installation Contracts For Gas Insulated Switchgear and Air Insulated Switchgear (Before 2000)	42	66 M
4	Electrical and Instrumentation (E&I) and Mechanical and Electrical (M&E) Scopes For Power Plants	19	111 M
5	Testing and Commissioning of substations	52	14 M
6	Rehabilitation Work of Substations	3	46 M
7	Electrical and Instrumentation (E&I) and Mechanical and Electrical (M&E) Scopes for Oil & Gas and Marine Ports	33	89 M
	<b>TOTAL</b>	<b>184</b>	<b>1,120 M</b>

**1. TURNKEY WORKS (DESIGN, SUPPLY, ERECT, TESTING AND COMMISSIONING) OF AIR INSULATED SWITCHGEAR SUBSTATIONS (PMU)**

NO	DESCRIPTION	YEAR COMPLETED
1.	Establishment of 132kV Gelang Patah, Johor	Feb - 2002
2.	Establishment Works for 132/33kV Temoh, Perak	Mar - 2002
3.	Establishment Works for 132/11kV Guar Chempedak, Kedah	Mar - 2002
4.	Extension Works for 132/33/11kV Cheng, Melaka	Jul - 2006
5.	Extension Works for 132/33/11kV Permas Jaya, Johor	Jul - 2006
6.	Extension Works for 132/33/11kV Perling, Johor	Oct - 2007
7.	Establishment of 500/275kV Lenggeng & 275kV Olak Lampit	Jan - 2008
8.	Extension Works for 132kV Tampoi, Johor	Jul - 2008
9.	Extension Works 132/33/11kV Kangkar Tebrau, Johor	Oct - 2010
10.	Establishment of 132/11kV Semabok, Melaka	Mar - 2011
11.	Establishment of 132/33/11kV Ujung Pasir, Melaka	Mar - 2011
12.	Establishment of 132/33kV Taman Jaya, Selangor	Sep - 2012
13.	Establishment of 132kV Sungai Siput Switching Station, Perak	Jun - 2013
14.	Upgrading Works for 132/33kV Parit Buntar, Perak	Jan - 2014
15.	Extension of 132/33kV Gua Musang, Kelantan	Mar - 2014
16.	Establishment of 132kV Cheil Jedang Switching Station, Terengganu	Apr - 2015
17.	Rehabilitation Works for 275/132kV Papan, Perak	Aug - 2015
18.	Establishment of 132/33kV Setia Alam, Selangor	Sep - 2015
19.	Establishment of 132/33kV Tapah Switching Station, Perak	Aug - 2016
20.	Establishment of 132/33kV Senai High-Tech East, Johor	Dec - 2017
21.	Installation Works for 500kV AIS Jimah East, Negeri Sembilan	Oct - 2018

**2. TURNKEY OR INSTALLATION WORKS OF GAS INSULATED SWITCHGEAR SUBSTATION (PMU)**

NO	DESCRIPTION	YEAR COMPLETED
1.	Installation for 275/132/33kV Sentul Raya, Kuala Lumpur	Feb - 2000
2.	Installation for 275/132/33/11kV KL West, Kuala Lumpur	Apr - 2000
3.	Establishment of 3 nos 275/132/33kV (Jln.Pantai/Brickfields/ Jln.Ipoh) Kuala Lumpur	Nov - 2000
4.	Installation for 275/132/33kV Shah Alam West, Selangor	Mar - 2001
5.	Establishment for 132/33kV Selibin, Perak	Apr - 2001
6.	Establishment of 275/132/33kV Bukit Raja, Selangor	Apr - 2005
7.	Installation for 275/132kV New Serdang, Selangor	Jun - 2005
8.	Installation for 275/132/33/11kV TNB Prai Substation, Penang	Jun - 2006
9.	Establishment of 275/132/11kV Vision City, Selangor	Dec - 2006
10.	Extension of 275kV/132kV Bayan Lepas, Penang	Apr - 2011
11.	Installation for 275/132 kV Subang Jaya, Selangor	Jan - 2014
12.	Installation of 275kV GIS at 275/132kV Subang Jaya, Selangor	Mar - 2015
13.	Establishment of 132/33kV Kajang Estate, Selangor	May - 2015
14.	Rehabilitation of 132kV GIS at 275/132kV KL North, Kuala Lumpur	Dec - 2017



## SUMMARY OF PROJECTS COMPLETED

### 3. Power Plant Works

NO	DESCRIPTION	YEAR COMPLETED
1.	Electrical and Instrumentation Works for 1024MW TNB Power Station Paka CCGT Conversion Terengganu	Jul - 1996
2.	Transformer Erection Works at 675MW Perlis Power IPP Project, Sg. Dua, Perlis	Dec - 1996
3.	Earthing Works for 190MW Teluk Salut, Sabah	Nov - 1999
4.	Testing Works at 600MW Pergau Power Station, Kelantan	Mar - 2002
5.	Rehabilitation Works at 319MW Tuanku Jaafar Power Station, Port Dickson, Negeri Sembilan	Sep - 2003
6.	Electrical and Instrumentation Works for 3x700MW Coal Fired Power Plant Manjung Power Station, Perak	Aug - 2003
7.	132kV Switchyard Works for 604MW Serdang Power Station, Selangor	Jun - 2005
8.	Testing Works for 100KW Sepangar Power Station, Sabah	Feb - 2006
9.	Electrical and Instrumentation Works for 3x700MW Coal Fired Power Plant, Tanjung Bin, Johor	Dec - 2006
10.	Electrical and Instrumentation Works for 2 X 700MW Coal Fired Power Plant Jimah IPP, Port Dickson, Negeri Sembilan	Dec - 2007
11.	Installation Works (Electrical, Instrumentation, Mechanical, Piping, Valves scopes) for Al-Jalamid 3x25MW Gas Turbine Power Plant, Saudi Arabia	Dec - 2009
12.	Cable-Laying & Termination for 1x1,000MW Coal Fired Power Plant Manjung-4 Project, Perak	May - 2014
13.	Electrical and Instrumentation Works for 1x1,000MW Coal Fired Power Plant Tanjung Bin-4 Project, Johor	Feb - 2016
14.	Turnkey Works for 20MW Krueng Isep RoR HydroElectric Plant, Aceh, Indonesia	Aug - 2017
15.	Electrical & Mechanical Works for 2x7.5MW Tembat Hydro, Hulu Terengganu	Sep - 2017
16.	Electrical and Instrumentation Works for 2x1000MW Jimah- 3 Power Plant, Port Dickson, Negeri Sembilan	Dec - 2019

### 4. Oil & Gas and Marine Ports Works

NO	DESCRIPTION	YEAR COMPLETED
1.	Electrical and Instrumentation Works for Petronas Second Refinery (PSR-1) Project, Melaka	Dec - 1994
2.	Transformer Replacement at Angsi Platform, Kertih offshore, Terengganu	Feb - 2002
3.	Testing of 415V LV Board, Duyong Platform, Kertih offshore, Terengganu	Jun - 2003
4.	Load Bank Provision & Testing at Resak Platform, Kerteh offshore, Terengganu	Aug - 2003
5.	Upgrade Gas Lifting/Injection at Tiong A & B and Kepong, Kerteh offshore, Terengganu	Feb - 2004
6.	Supply, Install & Commissioning of MOV for Prai Bulk Depot, Penang	Mar - 2004
7.	Replacement of Current Transformers at CUF Gebeng, Pahang	Mar - 2006
8.	Electrical and Instrumentation replacement for FGS, MCS & ASD at Tembungo-A, Sabah offshore	Jun - 2006
9.	Electrical and Instrumentation Works for Bashayer-2 Oil Marine Terminal, Port Sudan, Republic of Sudan	Mar - 2007
10.	Glycol Regeneration Panels Upgrading at Semarang-A, ErbWest-A, Sabah Offshore	Oct - 2007
11.	Electrical Works for MMHE West Finger Pier	Sep - 2009
12.	Oil Corrugated Plate Interceptor at Petronas Prai Bulk Depot, Pulau Pinang	Feb - 2011
13.	Electrical and Instrumentation Works for AP Topside (Process Platform) B-193 at Sime Darby Engineering, Johor	Dec - 2012
14.	Electrical Maintenance (3-year) for block 314, Kerteh offshore, Terengganu	May - 2014
15.	Electrical Early Works for SAMUR project, Sipitang, Sabah	Jul - 2014
16.	Tank Refurbishment Works under Petronas Plant Rejuvenation and Revamp-2 Project at Gas Processing Plant 2 Complex, Terengganu	Jul - 2014
17.	Tank Refurbishment Works under Petronas Plant Rejuvenation and Revamp-4 Project at Gas Processing Plant 4 Complex, Terengganu	Mar - 2015
18.	Electrical Maintenance (6+6month) for block 304, 305, Kertih offshore, Terengganu	Feb - 2016
19.	Construction and Commissioning (CC) of 275kV GIS Electrical Equipment Installation in Main Substation, Rapid, Pengerang (Package 14-1001)	Sep - 2018
20.	Construction and Commissioning (CC) Of 33kV and below Electrical Equipment Installation in Unit Substations, Rapid, Pengerang (Package 14-1002)	Feb - 2019
21.	Construction and Commissioning (CC) Of 33kv And Below Distribution Substation Feeder Cable Laying, Jointing and Termination at Gas Insulated Substation (GIS), Rapid, Pengerang (Package 14-1200)	Feb - 2019