



Energy on Demand

SES is a leading Power Provider serving temporary and medium term energy needs across the Middle East, Africa and South East Asia region.

SES offers fast track turnkey power rental solutions to help our customers maximize on productivity and profitability, while minimizing on downtime and resources with highest safety standards.

With an experienced technical team of proven capabilities in meeting energy needs, be it Emergency, Seasonal Demand, Remote off-grid applications or Grid supplement power requirement, we offer complete solutions to match your requirements with:

- Wide range of Silent efficient Generator sets, MV transformers, Switchgears and Accessories
- Medium Voltage Qualified Design and Application Engineering
- Installation Expertise and expedient Commissioning
- Operation and Maintenance teams with round the clock supervision
- Emergency response teams to immediate and short cycle needs
- Regional breadth, providing reach and service to customer applications across the region

We serve our customers from multiple Centers across Middle East and Africa where our solutions range from standalone low voltage generator hire, Powering Events and Concerts to Multi MW medium voltage power plants in remote areas operating 24/7.

Our Headquarter Facility in Jebel Ali Free Zone brings together our quality products and regional facilities in Saudi, Qatar, Oman and East Africa, as one supplier willing to partner with our customers to provide localized services wherever your business takes you next.

With a dedication to quality and innovation, the company continues to invest in a product range of Diesel and Gas reciprocating engines and a continuous commitment to environmental footprint and health and safety.

Our commitment to you is: Quality, Reliability and Availability.

Looking forward to serving you.

APPLICATIONS

OFFSHORE

Living Quarters
Underwater ROV
Platform Construction

MINING

Prime Power
Dewater and Ventilation
Excavation Equipment

SHIPPING

Scheduled Outages
Unscheduled Outages
Refrigeration

REFINERIES AND CHEMICAL PLANTS

Planned Outages
Switchgear Repair
Heat Treating / Stress Relief
Emergency outages
Plant Construction

UTILITIES

Peaking Power
Summer Prime
Interim Power
Reserve Margin
Planned Outages
Emergencies
Plant Construction

COMMERCIAL AND INDUSTRIAL

Peaking Power
Backup
Planned Outages
Emergencies

SPECIAL EVENT AND ENTERTAINMENT

Conventions
Concerts
Motion pictures
Sports



5MW - 100MW

Power Plant Solutions

Features

- Customized solutions to fit customer specific needs
- Multiple gensets configuration to accommodate varying load requirements
- 400 v → 33 KV at 50/60 Hz
- Base load, load sharing & load management (paralleling/optimized fuel consumption) application.
- Application engineering including site layout SLD and short circuit studies to provide optimized solution.
- Scheduled transportation, loading – offloading
- Installation and commissioning of the rental power plant
- Project management to insure availability and reliability levels
- Operation management by experienced engineers
- Maintenance management: periodic and breakdown support
- Standby gensets to maintain plant availability
- Comprehensive insurance policy to cover risk of loss and damage of equipments
- Optional schemes of power purchase through KWH charge or capacity charge

Project Execution Expertise

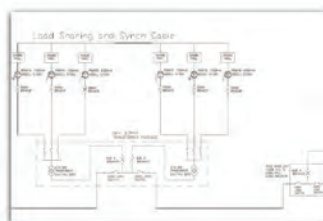
Project Operation Planning



Handover from Sales Team to Project Execution Team



SLD & HV Equipment Selection



Preparation for Project Execution



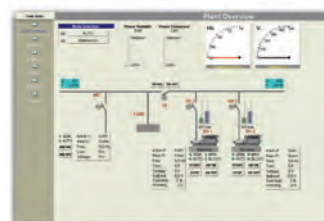
Equipment and Site Set Up and Qualification



COD...Site Operation and Monitoring



Power Management Module Setup



Decommissioning and Lessons Learned



RFR-1

RFR-2

RFR-3

RFR-4

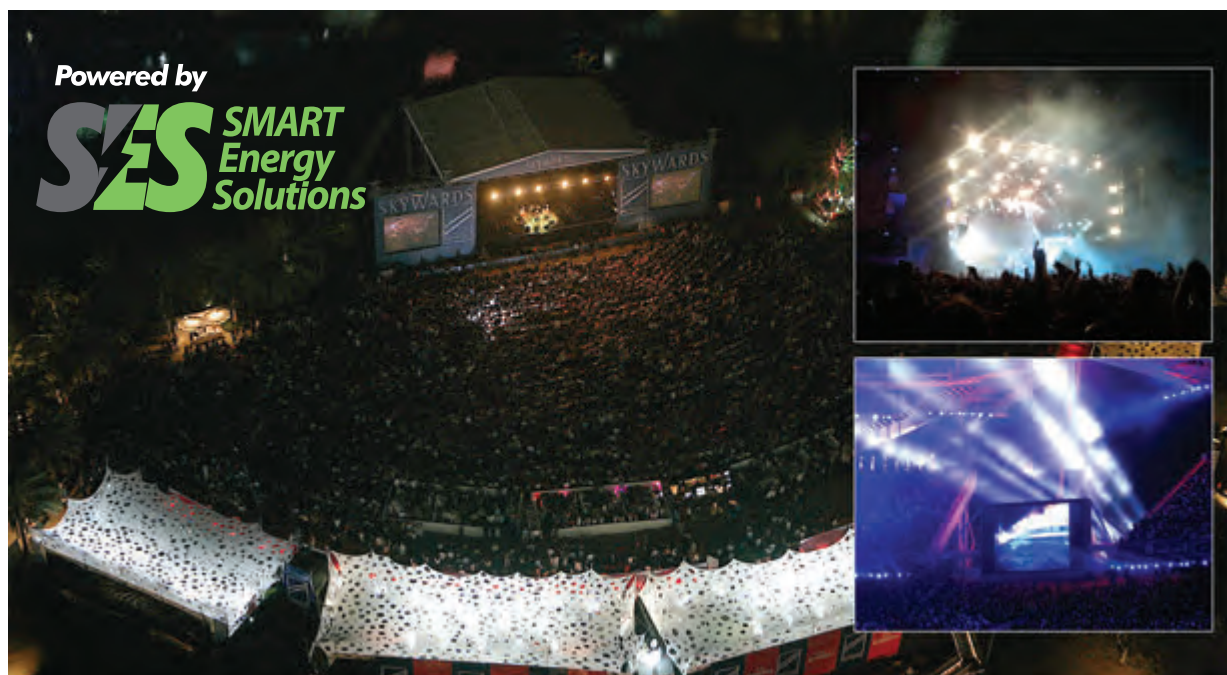
RFR-5

EVENTS



Features

- Application engineering including sizing calculations, single line diagrams and site layout
- Rental of silent generators with built in fuel tanks, main/sub distribution panels, automatic transfer switches manual transfer switches, low voltage cables and bulk fuel tanks
- Expertise in A/V & lighting requirements, and power reliability, stability & segregation
- Project management and coordinating with master project plan
- Paralleling capability and stand alone gensets applications
- Events grade silent generator canopy designed to reduce noise level
- Yellow jackets for pedestrian and cable protection
- 24/24 operation by experienced technical team
- Fuel Management, supply, filling procedure to industry standards and incompliance with local and all applicable EHS regulations





Energy on Demand

1250 kVA

Generating Set

Features

- Silenced, weather resistant steel housing
- Lockable enclosure
- Diesel powered
- Excellent Voltage Regulation - Power is controlled within 1% of main voltage
- Simultaneous single and three phase power
- Complete power panel - Fully covered terminals allow for fast and convenient hookup. All are NEMA standard
- Brushless generator design - reduces service and maintenance requirements
- Illuminated instrument panel
- Automatic safety shutdown system - real time monitoring of engine oil pressure and water temperature
- Synchronization and load sharing / management feature
- Warning lights indicate abnormal conditions/errors
- Easy maintenance design - quick and direct access to all the filters External fluid drain extensions allow fast & easy service

Technical Specifications

Standby Three phase output (50 Hz)	1102 Kw
Prime Three phase output (50 Hz)	998 Kw
Standby Three phase output (60 Hz)	1256 Kw
Prime Three phase output (60 Hz)	1142 Kw
Main Circuit Breaker	2500 A
Power factor	0.8 lag
Sound Level dB Full Load @ distance	79 @ 7M
Fuel type	#2 Diesel
Starting system	Electric
Fuel tank capacity (liters)	External
Fuel consumption at Full Load Standby rating 50 Hz (lph)	293
Fuel consumption at Full Load Prime rating 50 Hz (lph)	261
Fuel consumption at Full Load Standby rating 60 Hz (lph)	330
Fuel consumption at Full Load Prime rating 60 Hz (lph)	291
Coolant Capacity (liters)	270
Oil Capacity (liters)	177
Battery system	24 VDC system
L x W x H (meters)	6.05 x 2.44 x 2.59
Dry weight (kg)	23042
Wet weight (kg)	23950

Containerized Medium Voltage Transformers



Features

- 20' ISO containers up to 6.3 MVA multitap transformers
- IEC-76 Specifications
- ONAN Cooling
- Voltage range 2.4 kV to 36 kV
- CSC plated as a standard 20' feet container
- 50 & 60 Hz operation
- Step Up and Step down voltage applications
- Connects up to 6 x 1 MW gensets
- Easy access and simple cable connections
- Medium Voltage metering
- 630 A Medium voltage switchgear (BIBI)
- Pad-lockable breakers
- Low voltage Isolators
- Differential/transformer protections
- Bunded transformer section to contain leakage

Technical Specifications

Voltage Primary (50 Hz)	400 V
Voltage Secondary (50 Hz)	2.4 → 33 kV
Voltage Primary (60 Hz)	480 V
Voltage Secondary (60 Hz)	3.3 → 36 kV
Winding Connection	Wye-Wye / Wye-Delta
Coolant	Oil
LxWxH (mm)	6058 x 2438 x 2591
Weight (kg)	9500
Type	Outdoor
Enclosure	20' ISO
Design Approval (Frame)	ISO 668:1995 CSC plated



20,000 L

Containerized Fuel Tank

Features

- 110% banded fuel tank built inside ISO container complying with British Standards
- Manufactured to BS 799 Part 5 Construction of above ground tanks for flammable and inflammable liquids
- CSC plated as a standard 20' feet container
- Corner twist locks top & bottom for easy handling
- Robust steel in steel construction
- Can connect up to 6 gensets (supply and return)
- Can be installed End to End or Side to Side to form tank farms
- Can be stacked 6 high full of fuel, reducing storage space requirements and when on location
- Graduated level sight gauge
- Fast fuel fill connections with Camlock adapter
- Valves, Outlets and fittings are housed in a lockable compartment
- Overfill protection with mechanical shutoff valve
- A built in permanent ladder for ease of access to container roof
- Air breather vent and fittings with dust filter fitting

Technical Specifications

Standard Tank fittings	1"
6 sets of feed & return ports	2"
Tank Fill with NRV and Camlock	2"
Drain Overflow	2"
Capacity (liters)	20000
LxWxH (mm)	6058 x 2438 x 2591
Weight Empty (kg)	9500
Weight Full (kg)	32100
Inner Tank Wall (mm)	6
Bund Wall (mm)	4
Design Approval (Frame)	ISO 668:1995 CSC plated