ADVANCED ENERGY COMPANY (AECC)

ADVANCED ENERGY

HV SUBSTATIONS · TRANSMISSION · RENEWABLES

COMPANY PROFILE

2026

POWER EPC CONTRACTOR · EST. 2008 · RIYADH, KINGDOM OF SAUDI ARABIA

CONTENTS

Inside this profile.

01 About AECC
Who we are, leadership and values
PAGE 03

02 Capabilities
Full EPC scope up to 132kV
PAGE 09

03 Project Portfolio
Ongoing and completed projects
PAGE 17

04 QHSE
Quality, health, safety and environment
PAGE 34

05 Team
The people behind every project
PAGE 37

06 Contact
Let's build the next one together
PAGE 39

AECC at a glance.

An EPC contractor for the Kingdom's power sector, delivering HV substations, transmission lines, underground cables and renewables with one in-house team.

2.3B
TOTAL PROJECT VALUE

1B+
UNDER EXECUTION

18+
YEARS OF EXPERIENCE

500+
PROFESSIONALS

29
POWER PROJECTS

25M+
SAFE MAN-HOURS WITHOUT LTI

WHO WE ARE

Power EPC contractor since 2008.

Advanced Energy Company (AECC), established in 2008, is a power EPC contractor delivering complex, large-scale projects across Saudi Arabia.

AECC's work spans construction, renewable energy, and engineering across the Kingdom's infrastructure and energy sector. We carry each project from design to energization and beyond handover: engineering, procurement, civil and electrical construction, testing and commissioning.

HEAD OFFICE	ESTABLISHED	VOLTAGE CLASS	CR
Riyadh	2008	Up to 132 kV	1010259843

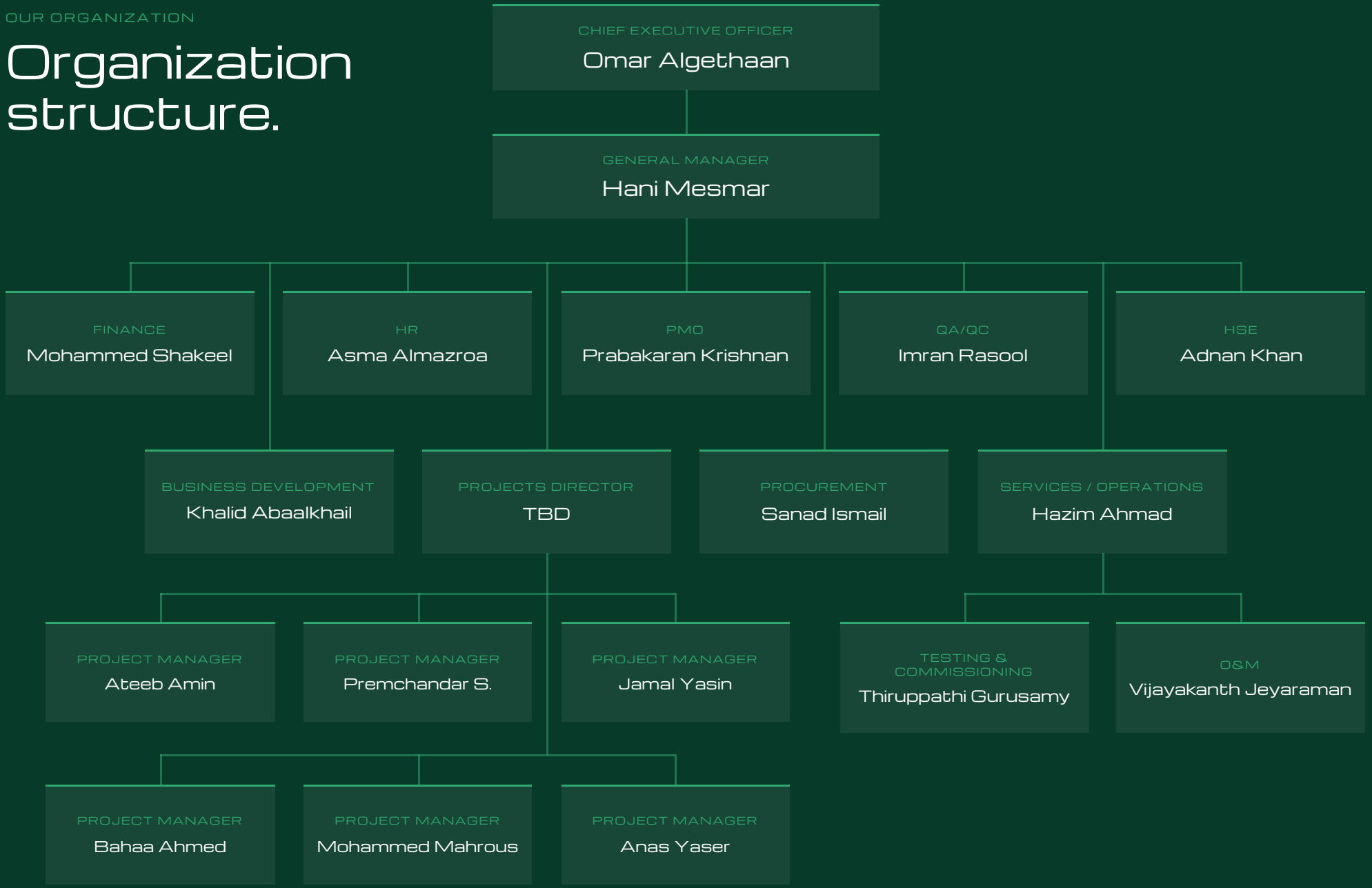
Part of Mohammed Ali AlSwailem Group (MASCO)

MASCO GROUP
مجموعة محمد العلي السويلم
Mohammed Ali Alswailem Group



OUR ORGANIZATION

Organization structure.





VISION

To be at the forefront of innovative and sustainable energy solutions within the Kingdom of Saudi Arabia.

MISSION

To deliver exceptional, fully integrated power EPC and services with the utmost professionalism, utilization of advanced technology, and fostering enduring partnerships to create a greener, more efficient energy future.

OUTLOOK FOR 2026

- Ensure 75% of new projects meet sustainability & efficiency standards
- Expand capabilities in electrical component facilities
- Invest in smart metering & control systems
- Reduce project lead times by up to 20% (2026-2030)
- Achieve a 95% customer satisfaction rate
- Implement Lean Construction & Six Sigma methodologies

CORE VALUES

What guides every project.

Six values shape how we work with clients, partners and each other, on site and in the design office.

01

Integrity

Honesty and transparency in all business dealings.

02

Safety

Well-being of team, clients, and community as top priority.

03

Collaboration

Open communication and teamwork to drive innovation.

04

Citizenship

Responsible corporate citizenship, sustainable initiatives.

05

Quality

Exceptional solutions that surpass client expectations.

06

Excellence

Advancing the sector through best practices.

HOW WE DELIVER

What we bring to a project.

Backed by a group with over four decades of experience, certified to ISO 9001, 14001 and 45001, and prequalified with the Kingdom's largest energy buyers. We compete on execution certainty and delivery discipline.

IN-HOUSE DELIVERY

500+ professionals, one team

Construction, engineering, and project controls under one roof.

PREQUALIFIED

Awarded across the Kingdom's energy sector

Active prequalification and awarded contracts with all the major energy producers across the Kingdom.

CERTIFIED

ISO 9001, 14001 & 45001

Quality, environmental, and occupational health & safety management, independently certified.

TRACK RECORD

25M+ safe man-hours

Recognized by Maaden and Worley for man-hours without a Lost Time Injury.

INTEGRATED SCOPE

Construction to commissioning

One delivery team across construction, renewables, and engineering.

REPORTED PROGRESS

Transparent execution tracking

Every live project is tracked against internal quality and safety performance targets and planned-vs-actual schedule.

GROWTH TARGETS

- Achieve project scales of up to $2B across power projects
- Increase project wins by 25% annually through strategic partnerships
- Expand client base with 10+ leading infrastructure & power clients within five years

02

Capabilities

Full EPC scope up to 132kV, from design to energization and beyond handover.



EPC services up to 132kV.

Six capabilities carry each project from design to energization and beyond handover – engineering, procurement, construction, testing and long-term support, all delivered in-house.



01 · UP TO 132 KV

HV Substations (EPC)



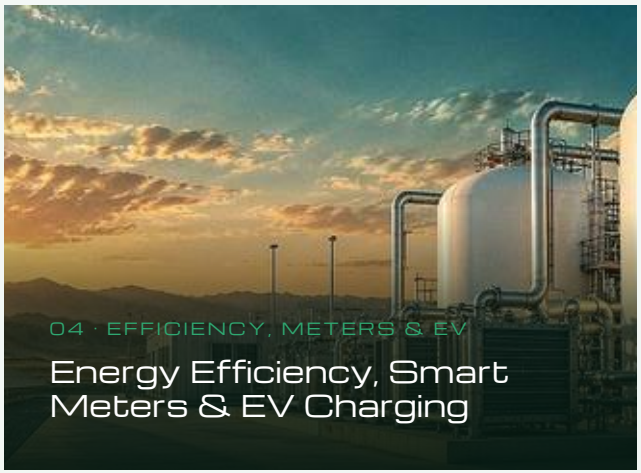
02 · OHL & UNDERGROUND

Transmission & Cables



03 · UTILITY-SCALE PV

Renewable Energy



04 · EFFICIENCY, METERS & EV

Energy Efficiency, Smart Meters & EV Charging



05 · ENERGIZATION & HANDOVER

Testing & Commissioning



06 · POST-ENERGIZATION

Operations & Maintenance



CAPABILITY 01

HV Substations (EPC)

WHAT WE DELIVER

- Engineering & design
- Construction & Installation
- Testing & Commissioning

Indoor GIS & AIS substations, up to 132kV.

New-build and modification of HV substations for all the major energy producers across the Kingdom, including site works, civil, electrical installation, testing, and commissioning to client specification.

- Indoor & outdoor GIS substations
- Existing substation modification & expansion
- Power facilities & industrial automation

INDOOR · GAS-INSULATED (GIS)

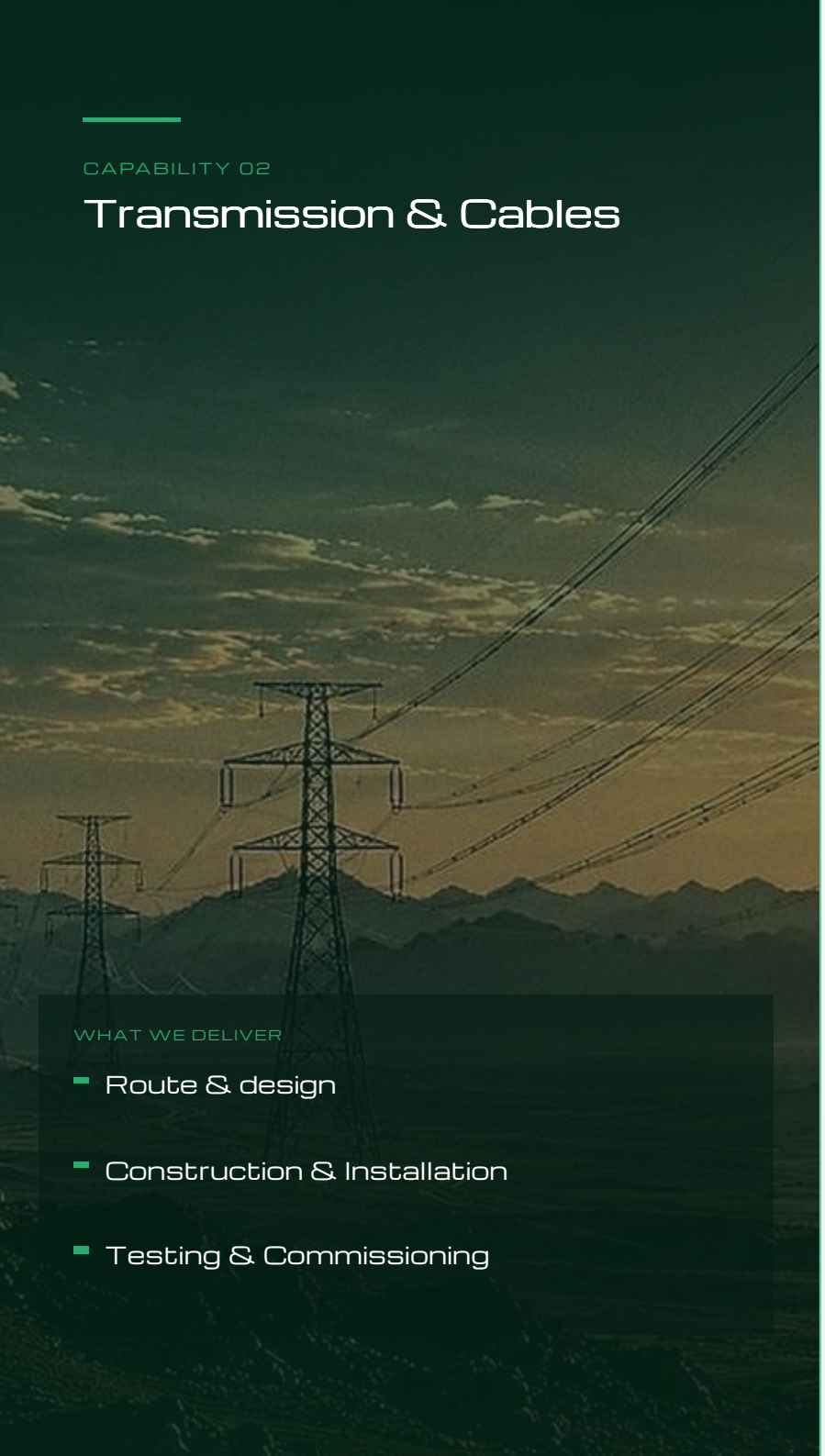
Switchgear sealed in SF6 gas cuts the footprint dramatically versus an equivalent air-insulated layout, and keeps live equipment out of desert dust, sand, and humidity. The standard choice where site space is constrained.

OUTDOOR · AIR-INSULATED (AIS)

Open-yard construction using air as the insulating medium, a lower upfront cost, and straightforward expansion bay by bay as load grows. The standard choice where land isn't the constraint.

SELECTED REFERENCES

115kV GIS Substation · Maaden, Ras Al-Khair	115 KV
Nimar S/S #8132 · SE, Riyadh	132 KV
Al-Watania S/S 8866 · SE, Al Qassim	132 KV
Khafji Substation #5 · SE, Khafji	115 KV
New Badr S/S · SE, Al Madina	110 KV



CAPABILITY 02

Transmission & Cables

WHAT WE DELIVER

- Route & design
- Construction & Installation
- Testing & Commissioning

Transmission lines and HV cable routing.

Overhead transmission corridors and HV underground cable installation across multi-route projects, engineered for the Kingdom's terrain.

- Overhead transmission line (OHTL)
- HV underground cable installation
- Route engineering & trenching

OVERHEAD · TRANSMISSION LINE

Lower cost per route kilometre and fully visible for inspection and fault-finding while energized. The standard choice for long, open-terrain corridors.

UNDERGROUND · HV CABLE

Higher upfront cost, but shielded from wind, lightning, and desert sandstorms, and doesn't compete for surface right of way. The standard choice through urban and site-constrained corridors.

SELECTED REFERENCES

Underground Cables, Qatif to Tarut S/S #2 · SE, 23.7 km	115 KV
New Badr Overhead Transmission Line · SE, Al Madina	110 KV
132kV Substation Expansion, cable circuits · Maaden, 6.5 km	132 KV
S/S Interconnection · SE, Al Qassim	33 KV

CAPABILITY 03

Renewable Energy

WHAT WE DELIVER

- Feasibility & design
- Construction
- Operation & maintenance



RENEWABLE ENERGY

Utility-scale solar.

We develop, construct, operate, and maintain utility-scale renewable power projects, built for the Kingdom's diversification targets and Vision 2030.

- Utility-scale solar PV, feasibility through O&M
- Grid interconnection for renewable assets

CAPABILITY 04

Energy Efficiency, Smart Meters & EV Charging

WHAT WE DELIVER

- Efficiency audits
- Smart meters
- EV chargers





ENERGY EFFICIENCY, SMART METERS & EV CHARGING

Efficiency, smart metering and EV charging.

Efficiency improvements across generation and distribution assets, smart metering, and EV charging infrastructure connected to the grid.

- Generation & distribution efficiency audits
- Smart meter supply & installation
- EV charger installation & grid connection

CAPABILITY 05

Testing & Commissioning

WHAT WE DELIVER

- Pre-commissioning
- Energization
- Handover



TESTING & COMMISSIONING

Full commissioning scope from pre-commissioning, commissioning and energization through performance and load testing, executed to the client's commissioning procedure and handed over test-certified.

- Pre-commissioning, commissioning and energization & live system testing
- Performance & load testing
- Client handover documentation

SELECTED REFERENCES

115kV GIS Substation · RAK	115 kV	132kV Substation Expansion · WAS	132 kV
Al-Watania S/S 8866	132 kV	Underground Cables, Qatif to Tarut	115 kV
13.8kV MSSD Substation · SPARK	13.8 kV	13.8kV MSSD Substation · Jeddah	13.8 kV

CAPABILITY 06

Operations & Maintenance

WHAT WE DELIVER

- Preventive
- Corrective
- Spare parts



OPERATIONS & MAINTENANCE

Preventive and corrective maintenance.

Preventive maintenance schedules, corrective response and spare-parts planning for HV substations and transmission assets, keeping delivered infrastructure running to the standard it was built to. Plant condition is watched around the clock, and every intervention is recorded and reported to the client.

- **Preventive maintenance programs**
  Scheduled inspection, testing and servicing
- **Corrective maintenance**
  Fault response and repair to restore service
- **Plant availability guarantees**
  Availability commitments agreed with the client
- **Spare parts management**
  Critical spares planned, stocked and tracked
- **24/7 remote plant monitoring**
  Round-the-clock condition and alarm monitoring
- **Information management and reporting**
  Maintenance records and performance reports

SELECTED REFERENCES

115kV GIS Substation · RAK	115 kV	132kV Substation Expansion · WAS	132 kV
Al-Watania S/S 8866	132 kV	Underground Cables, Qatif to Tarut	115 kV
13.8kV MSSD Substation · SPARK	13.8 kV	13.8kV MSSD Substation · Jeddah	13.8 kV

03

Project Portfolio

29 power projects across the Kingdom, executed for its major energy producers.





03 · FOOTPRINT

Across the Kingdom.

29
PROJECTS

12
LOCATIONS

10
ONGOING

19
COMPLETED

CLIENTS

Executed for the Kingdom's major energy producers.

















Ongoing projects.

Under execution across the Kingdom for all major energy producers.

Al-Watania S/S 8866, 132/33kV SE · AL QASSIM	132 kV
132kV Substation Expansion MAADEN · WAAD AL SHAMAL	132 kV
115kV GIS Substation MAADEN · RAS AL-KHAIR	115 kV
Muzdalifa S/S Replacement, 110/13.8kV SE · MAKKAH	110 kV
Muna-1 S/S Replacement, 110/13.8kV SE · MAKKAH	110 kV
Interconnection Between S/S 7808-7847, 7818-7841 & 7802-7803 SE · AL QASSIM	33 kV
Al Safa Palace MV Electrical Reliability SE · MAKKAH	MV
Amiral Industrial Support Facility (ISF), IT & Security Pkg #6 SAUDI ARAMCO · JUBAIL	MV
13.8kV MSSD Substation, SPARK SAUDI ARAMCO · ABQAIQ	13.8 kV
13.8kV MSSD Substation SAUDI ARAMCO · JEDDAH	13.8 kV







132 KV

Al-Watania S/S 8866, 132/33kV

SAUDI ENERGY (SE) · AL QASSIM

The Al-Watania substation project in Al Qassim added two 132kV power transformers and 29 panels of 33kV switchgear to the network, along with a STATCOM for dynamic reactive power compensation. AECC's scope spanned protection, control and telecommunications systems, a full substation automation system, and the civil works, installation, testing and commissioning needed to bring the station into service.

- Two 132kV power transformers
- 29 × 33kV switchgear panels
- STATCOM (static synchronous compensator)
- Protection, control & telecommunications systems







ONGOING PROJECT

MAADEN

132kV Substation Expansion

132 kV

CLIENT	LOCATION
Maaden	Waad Al Shamal

This project expanded Maaden's existing 132kV substation at Waad Al Shamal with a two-bay 132kV GIS extension and two power transformers rated 123/137.5 MVA. AECC's scope covered the protection and power management system, MEP, HVAC and fire protection works, together with two new 132kV underground cable circuits running 6.5 kilometres and two 34.5kV underground cable circuits over a 600 metre route.

- 132kV GIS extension, 2 bays
- Two 132/34.5kV, 123/137.5 MVA power transformers
- Protection & power management system (PMS)
- MEP, HVAC, fire alarm & fire-fighting systems







ONGOING PROJECT

MAADEN

115kV GIS Substation

115 kV

CLIENT

Maaden

LOCATION

Ras Al-Khair

AECC delivered a new 115kV gas-insulated switchgear substation for Maaden at Ras Al-Khair, built around a nine-bay 115kV GIS yard and two 132/34.5kV power transformers rated 60/75 MVA. The scope extended to a 21-panel 34.5kV GIS switchgear installation, full protection, power management and telecommunications systems, and the supporting MEP, HVAC, fire alarm and fire-fighting infrastructure. Two new 115kV underground cable circuits were laid along a 3.3 kilometre route to connect the substation into the network.

- 115kV GIS, 9 bays
- Two 132/34.5kV, 60/75 MVA power transformers
- 34.5kV GIS switchgear, 21 panels
- Protection, PMS & telecommunications







se
saudi energy

110 KV

Muzdalifa S/S Replacement, 110/13.8kV

SAUDI ENERGY (SE) · MAKKAH

AECC replaced the existing substation at Muzdalifa with a new 110/13.8kV facility, supplying the grid transformers, 13.8kV switchgear, capacitor banks and shunt reactors that form its core. The scope extended to the relay and control panels, AC/DC and auxiliary transformer panels, HV, MV and LV cabling, and a substation automation system with telecommunications integration.

- Replacement of the existing 110/13.8kV substation by construction of a new 110/13.8kV substation
- 110/13.8kV grid transformers
- 13.8kV switchgear, capacitor banks & shunt reactors

se
saudi energy

110 KV

Muna-1 S/S Replacement, 110/13.8kV

SAUDI ENERGY (SE) · MAKKAH

This project replaced the existing substation at Muna-1 with a new 110/13.8kV facility built around new grid transformers, 13.8kV switchgear, capacitor banks and shunt reactors. AECC's scope also covered the relay and control panels, AC/DC and auxiliary transformer panels, the full complement of HV, MV and LV cabling, and the substation automation and telecommunications systems.

- Replacement of the existing 110/13.8kV substation by construction of a new 110/13.8kV substation
- 110/13.8kV grid transformers
- 13.8kV switchgear, capacitor banks & shunt reactors











33 KV

Interconnection Between S/S 7808-7847, 7818-7841 & 7802-7803

SAUDI ENERGY (SE) · AL QASSIM

AECC is carrying out the interconnection works linking six 33kV substations across Al Qassim (7802, 7803, 7808, 7818, 7841 and 7847), modifying and converting the existing switchgear feeders to support the new network configuration.

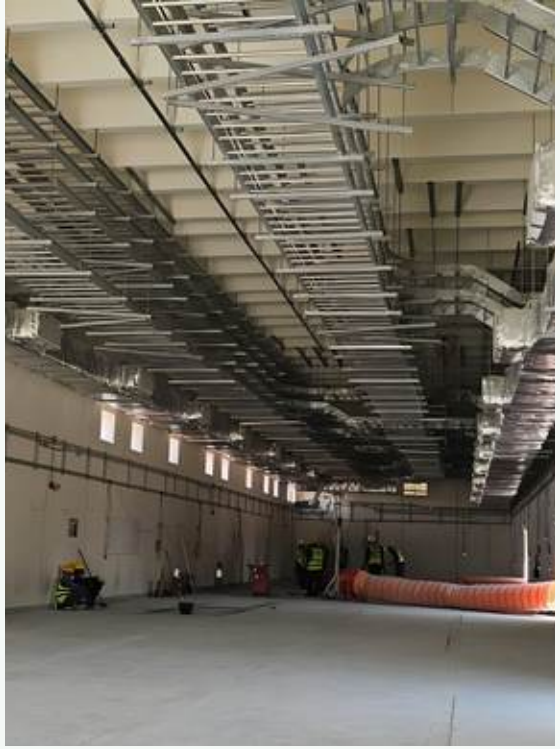
- Interconnection of six 33kV substations
- Modification & conversion of switchgear feeders
- New network configuration across Al Qassim

Al Safa Palace MV Electrical Reliability

SAUDI ENERGY (SE) · MAKKAH

This project improved the medium-voltage electrical reliability serving the Al Safa Palace area in Makkah. AECC renewed the electrical systems within the existing MV building and carried out the associated civil works, while also constructing a new MV building. SCADA, telecommunications and fibre-optic cabling were installed between the stations to tie the network together.

- Electrical works to renew the existing MV building, plus civil works
- Construction of a new MV building
- SCADA, telecommunications & fibre-optic cabling between stations



13.8 KV

13.8kV MSSD Substation, SPARK

SAUDI ARAMCO · ABQAIQ · SPARK

For Aramco's SPARK in Abqaiq, AECC delivered a 13.8kV medium-voltage substation built around an oil-immersed power transformer rated 2.5/3.15 MVA and a full suite of low-voltage switchgear, including ERMS, ATS and a motor control centre. The scope included power system automation, a dry-type auxiliary transformer, MV and LV control cabling with termination, and the grounding grid, lightning protection and lighting systems, closing with full testing and commissioning.

- 13.8kV MV switchgear
- 2.5/3.15 MVA, 13.8kV/480V oil-immersed power transformer
- Power System Automation (PSA)

13.8 KV

13.8kV MSSD Substation

SAUDI ARAMCO · JEDDAH

AECC executed a 13.8kV medium-voltage substation for Aramco in Jeddah, centred on a 2.5/3.15 MVA oil-immersed power transformer and power system automation. Work included the low-voltage switchgear and motor control centre, a dry-type auxiliary transformer, MV, LV and multi-core control cabling, and the grounding, lightning protection and lighting systems, with testing and commissioning carried out before handover.

- 13.8kV MV switchgear
- 2.5/3.15 MVA, 13.8kV/480V oil-immersed power transformer
- Power System Automation (PSA)

Completed projects.

Delivered, energized and handed over across the Kingdom for all major energy producers.

New Al Fath S/S, 132/13.8kV SE · AL MADINA	132 kV
Al-Kadrh (Abu Sadad) S/S, 132/33/13.8kV SE · ABHA	132 kV
Rehabilitation of Fire-Damaged S/S 8014, 132/13.8kV SE · RIYADH	132 kV
West Buraydah S/S #8840, 132/13.8kV SE · AL QASSIM	132 kV
Khafji Substation #5, 115/13.8kV SE · KHAFJI	115 kV
Underground Cables, Qatif to Tarut S/S #2 SE · QATIF	115 kV
New Badr Overhead Transmission Line, 110kV SE · AL MADINA	110 kV
New Badr S/S, 110/33/13.8kV SE · AL MADINA	110 kV
Arafat-2 S/S, 110/13.8kV SE · MAKKAH	110 kV

More completed projects follow, and every project is listed in the project register on page 33.







132 KV

New Al Fath S/S, 132/13.8kV

SAUDI ENERGY (SE) · AL MADINA · COMPLETED 2025

AECC delivered the New Al Fath substation in Madinah as main EPC contractor for Saudi Energy, a new 132/13.8kV facility completed in 2025. The scope covered design and engineering, procurement and delivery of equipment and materials, substation construction, and testing and commissioning through to energisation.

- Main EPC of new 132/13.8kV substation
- Design, engineering, procurement & delivery
- Substation construction works
- Testing & commissioning, energised 2025







COMPLETED PROJECT

Al-Kadrh (Abu Sadad) S/S, 132/33/13.8kV

132 kV

CLIENT

Saudi Energy (SE)

LOCATION

Abha

AECC delivered the Al-Kadrh substation at Abu Sadad near Abha as a ten-bay indoor GIS facility spanning three voltage levels, 132/33/13.8kV. The project supplied five power transformers in total, three rated 67 MVA and two rated 70/55 MVA, alongside 40 circuit breakers of 13.8kV switchgear and four capacitor banks split across the 13.8kV and 33kV levels. The scope covered protection, control, SCADA, substation automation and telecommunications systems, with testing and commissioning completed before handover.

- EPC of new 132/33/13.8kV indoor GIS-type substation, 10 bays
- Three 132/13.8kV, 67 MVA power transformers
- Two 132/33kV, 70/55 MVA power transformers
- 13.8kV switchgear, 40 circuit breakers





COMPLETED PROJECT

Khafji Substation #5, 115/13.8kV

115 kV

CLIENT

Saudi Energy (SE)

LOCATION

Khafji

AECC delivered Khafji Substation #5 as a new indoor GIS facility rated 115/13.8kV, supplying and installing three power transformers rated 67 MVA. The scope spanned detailed engineering and procurement, protection, control, SCADA, substation automation and telecommunications systems, and the civil and mechanical construction works, with testing and commissioning completed before the station was connected to the network.

- EPC of new 115/13.8kV indoor GIS substation
- Three 115/13.8kV, 67 MVA power transformers
- Detailed engineering, procurement & delivery of material
- Protection, control, SCADA, SAS & telecom systems





COMPLETED PROJECT

Underground Cables, Qatif 115/13.8kV to Tarut 115/13.8kV S/S #2

115 kV

CLIENT

Saudi Energy (SE)

LOCATION

Qatif

AECC installed the underground high-voltage cable link between Qatif and Tarut substations for Saudi Energy, covering two routes totalling roughly 23.7 kilometres. The works included trenching and duct-bank civil construction, cable laying, pulling and jointing, and fibre-optic duct installation alongside the power cables, concluding with testing and commissioning of the completed link.

- Route 1: Qatif 115/13.8kV S/S #2 to Tarut 115/13.8kV S/S #2, approx. 15.0 km
- Route 2: Qatif 115/13.8kV S/S #2 to Point "A", approx. 8.7 km
- Trenching & duct-bank civil works
- Cable laying, pulling & jointing



132 KV · RIYADH

Rehabilitation of Fire-Damaged S/S 8014, 132/13.8kV

Saudi Energy (SE). Following fire damage at substation 8014 in Riyadh, AECC carried out the full rehabilitation as main EPC contractor, beginning with a damage assessment and engineering review.



132 KV · AL QASSIM

West Buraydah S/S #8840, 132/13.8kV

Saudi Energy (SE). The West Buraydah substation project delivered an 11-bay indoor GIS facility rated 132/13.8kV in Al Qassim, with three power transformers rated 67 MVA and 38 circuit breakers of 13.8kV switchgear.



132 KV · RIYADH

Nimar S/S #8132, 132/13.8kV

Saudi Energy (SE). AECC delivered the Nimar substation in Riyadh as a ten-bay indoor GIS facility rated 132/13.8kV, supplying three power transformers rated 67 MVA and 44 circuit breakers of 13.8kV switchgear.



132 KV · RIYADH

Al Faisalyah S/S #8158, 132/13.8kV

Saudi Energy (SE). The Al Faisalyah substation project delivered a ten-bay indoor GIS facility in Riyadh rated 132/13.8kV, with three power transformers rated 67 MVA and 44 circuit breakers of 13.8kV switchgear.



132 KV · RIYADH

Al Mansourah S/S #8186, 132/13.8kV

Saudi Energy (SE). AECC delivered the Al Mansourah substation in Riyadh as a ten-bay indoor GIS facility rated 132/13.8kV, supplying three power transformers rated 67 MVA and 44 circuit breakers of 13.8kV switchgear.



132 KV · RIYADH

Al Falah S/S #8180, 132/13.8kV

Saudi Energy (SE). The Al Falah substation in Riyadh was delivered by AECC as a ten-bay indoor GIS facility rated 132/13.8kV, built around three power transformers rated 67 MVA and 44 circuit breakers of 13.8kV switchgear.



110 KV · AL MADINAH

New Badr Overhead Transmission Line, 110kV

Saudi Energy (SE). AECC built two new 110kV double-circuit overhead transmission lines, approximately 2.95 kilometres, connecting the New Badr substation into the grid on latticed steel towers.



110 KV · AL MADINA

New Badr S/S, 110/33/13.8kV

Saudi Energy (SE). The New Badr substation project delivered a new indoor GIS facility in Madinah rated 110/33/13.8kV, with a nine-bay switchgear arrangement split 5+4 across voltage levels.



110 KV · MAKKAH

Arafat-2 S/S, 110/13.8kV

Saudi Energy (SE). AECC delivered the Arafat-2 substation as a ten-bay indoor GIS facility rated 110/13.8kV, supplying three power transformers rated 50/67 MVA and 34 circuit breakers of 13.8kV switchgear.



110 KV · MAKKAH

Wali Al Ahad S/S, 110/13.8kV

Saudi Energy (SE). The Wali Al Ahad substation in Makkah was delivered by AECC as a nine-bay indoor GIS facility rated 110/13.8kV, built around three power transformers rated 50/67 MVA and 34 circuit breakers of 13.8kV switchgear.



110 KV · JEDDAH

Thuwal Town S/S, 110/13.8kV

Saudi Energy (SE). AECC built the Thuwal Town substation as a nine-bay indoor GIS facility rated 110/13.8kV, with two power transformers rated 54/73 MVA and two auxiliary transformers supporting the station's own supplies.



110 KV · MAKKAH

Al-Sharaia-2 S/S, 110/13.8kV

Saudi Energy (SE). The Al-Sharaia-2 substation project delivered a nine-bay indoor GIS facility in Makkah rated 110/13.8kV, with three power transformers rated 54/73 MVA and two auxiliary transformers.



110 KV · MAKKAH

Al-Zahra-2 S/S, 110/13.8kV

Saudi Energy (SE). AECC delivered the Al-Zahra-2 substation in Makkah as a nine-bay indoor GIS facility rated 110/13.8kV, supplying three power transformers rated 54/73 MVA and two auxiliary transformers.



110 KV · JEDDAH

Al-Shate S/S, 110/13.8kV

Saudi Energy (SE). The Al-Shate substation in Jeddah was delivered by AECC as a nine-bay indoor GIS facility rated 110/13.8kV, built around three power transformers rated 54/73 MVA and two auxiliary transformers.



MV / LV · AL MADINA

Electrical Grid of MV/LV at MSTP Madinah Munawarah

Ministry of Environment, Water & Agriculture. AECC delivered the medium- and low-voltage electrical grid for the MSTP power generation facility in Madinah Munawarah, supporting seven diesel-fuelled power blocks rated 2.8 MW each for a total installed capacity of 19.6 MW.



IT & SECURITY · JUBAIL

Amiral Industrial Support Facility (ISF), IT & Security Pkg #6

Saudi Aramco. At Aramco's Amiral Industrial Support Facility in Jubail, AECC supplied, installed and commissioned the medium-voltage network serving the IT and security package.

FULL REGISTER

All 29 projects, with client, voltage, location and scope, on the next page.

Project register.

No.	Project	Client	Voltage	Location	Scope
01	115kV GIS Substation	Maaden	115 kV	Ras Al-Khair	HV Substation
02	132kV Substation Expansion	Maaden	132 kV	Waad Al Shamal	HV Substation
03	13.8kV MSSD Substation, SPARK	Saudi Aramco	13.8 kV	Abqaiq · SPARK	HV Substation
04	13.8kV MSSD Substation	Saudi Aramco	13.8 kV	Jeddah	HV Substation
05	Amiral Industrial Support Facility (ISF), IT & Security Pkg #6	Saudi Aramco	MV	Jubail	Engineering
06	Underground Cables, Qatif 115/13.8kV to Tarut 115/13.8kV S/S #2	Saudi Energy	115 kV	Qatif	Transmission
07	Al-Watania S/S 8866, 132/33kV	Saudi Energy	132 kV	Al Qassim	HV Substation
08	Al Safa Palace MV Electrical Reliability	Saudi Energy	MV	Makkah	HV Substation
09	Interconnection Between S/S 7808-7847, 7818-7841 & 7802-7803	Saudi Energy	33 kV	Al Qassim	Transmission
10	Muzdalifa S/S Replacement, 110/13.8kV	Saudi Energy	110 kV	Makkah	HV Substation
11	Muna-1 S/S Replacement, 110/13.8kV	Saudi Energy	110 kV	Makkah	HV Substation
12	New Al Fath S/S, 132/13.8kV	Saudi Energy	132 kV	Al Madina	HV Substation
13	New Badr S/S, 110/33/13.8kV	Saudi Energy	110 kV	Al Madina	HV Substation
14	New Badr Overhead Transmission Line, 110kV	Saudi Energy	110 kV	Al Madina	Transmission
15	Rehabilitation of Fire-Damaged S/S 8014, 132/13.8kV	Saudi Energy	132 kV	Riyadh	HV Substation
16	Khafji Substation #5, 115/13.8kV	Saudi Energy	115 kV	Khafji	HV Substation
17	West Buraydah S/S #8840, 132/13.8kV	Saudi Energy	132 kV	Al Qassim	HV Substation
18	Arafat-2 S/S, 110/13.8kV	Saudi Energy	110 kV	Makkah	HV Substation
19	Wali Al Ahad S/S, 110/13.8kV	Saudi Energy	110 kV	Makkah	HV Substation
20	Al-Kadrh (Abu Sadad) S/S, 132/33/13.8kV	Saudi Energy	132 kV	Abha	HV Substation
21	Thuwal Town S/S, 110/13.8kV	Saudi Energy	110 kV	Jeddah	HV Substation
22	Al-Sharaia-2 S/S, 110/13.8kV	Saudi Energy	110 kV	Makkah	HV Substation
23	Al-Zahra-2 S/S, 110/13.8kV	Saudi Energy	110 kV	Makkah	HV Substation
24	Al-Shate S/S, 110/13.8kV	Saudi Energy	110 kV	Jeddah	HV Substation
25	Nimar S/S #8132, 132/13.8kV	Saudi Energy	132 kV	Riyadh	HV Substation
26	Al Faisalyah S/S #8158, 132/13.8kV	Saudi Energy	132 kV	Riyadh	HV Substation
27	Al Mansourah S/S #8186, 132/13.8kV	Saudi Energy	132 kV	Riyadh	HV Substation
28	Al Falah S/S #8180, 132/13.8kV	Saudi Energy	132 kV	Riyadh	HV Substation
29	Electrical Grid of MV/LV at MSTP Madinah Munawarah	MEWA	MV / LV	Al Madina	Engineering

04

QHSE

Quality, health, safety and environment: certified management systems and 25M+ safe man-hours.



Recognized safety performance.

25M+
SAFE MAN-HOURS WITHOUT LTI

5
CLIENT SAFETY AWARDS



Best Contractor of the Month
WORLEY · JUNE 2025



40 Million Safe Work Hours
WORLEY · MAADEN PHOSPHATE 3, PHASE 1



20 Million Safe Man-Hours
WORLEY & MAADEN



5 Million Man-Hours, LTI-Free
WORLEY & MAADEN



3.5 Million Man-Hours, LTI-Free
MAADEN PHOSPHATE 3, PHASE 1 (WAS/RAK)

ISO 9001, 14001 and 45001 certified.



ISO 9001:2015

Quality Management System

Certified to ISO 9001:2015. Every project is tracked against internal quality targets.



ISO 14001:2015

Environmental Management System

Certified to ISO 14001:2015. Applied across our renewable energy and infrastructure scope.



ISO 45001:2018

Occupational Health & Safety Management

Certified to ISO 45001:2018. Safety procedures apply across every project site.

05

Team

500+ professionals, on site and in the design office.



OUR TEAM

500+ professionals

From field engineers to protection & control specialists, AECC's team carries every project from design to energization and beyond handover.

FIELD & SITE

Construction & Site Engineering

Substation and transmission line delivery, mobilization through commissioning.

DESIGN OFFICE

Primary & Secondary Engineering

HV equipment specification, protection & control system design.

CORPORATE

Project Controls, HSE & Planning

Scheduling, cost control, safety, and reporting across live EPC projects.



ADVANCED ENERGY

06 · CONTACT

Let’s build the next one together.

HEAD OFFICE

6270 Ibn Hubayrah, Al-Zahra
Riyadh 12812, Saudi Arabia

TELEPHONE

+966 11 477 7742

EMAIL

aecc@aecc.com.sa

WEB

aecc.com.sa

ADVANCED ENERGY COMPANY · CR 1010259843

