

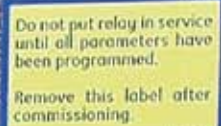
ONSHORE GAS DEVELOPMENT (OGD) III
/ ABU DHABI, UNITED ARAB EMIRATES

In Charge of Your Energy.

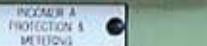


The Skema logo is located at the top right of the image, featuring the word "Skema" in a blue, sans-serif font with a registered trademark symbol. It is mounted on a white rectangular background which is affixed to the green metal cabinet. A black arrow points to the left from the top right corner of the image, passing behind the logo.

Skema®

A yellow warning label is placed over the central part of the control panel's screen. The text on the label is in black and reads: "Do not put relay in service until all parameters have been programmed. Remove this label after commissioning." The control panel itself is a blue-framed device with a screen and several physical buttons.

Do not put relay in service until all parameters have been programmed.
Remove this label after commissioning.

A small white label with black text is mounted on the green cabinet below the control panel. The text reads "INCREASE A PROTECTION & INTERLOCKING".

INCREASE A PROTECTION & INTERLOCKING

Four white test sockets are arranged in a horizontal row on the green cabinet. Each socket has the word "ESSAILED" printed vertically on its face. Below each socket is a small white label with black text: "OPEN TEST SOCKET", "WELDED TEST SOCKET", and "WELDED TEST SOCKET".

ESSAILED
ESSAILED
ESSAILED
ESSAILED

OPEN TEST SOCKET
WELDED TEST SOCKET
WELDED TEST SOCKET

ONSHORE GAS DEVELOPMENT (OGD) III / Abu Dhabi, United Arab Emirates

415V SWITCHGEAR / MCCs
INTEGRATED PROTECTION AND CONTROL SYSTEM (IPCS)





415V SWITCHGEAR / MCCs

The \$1.5 billion Onshore Gas Development (OGD) III Project involves the expansion of the production capacity of a massive gas-processing plant in Habshan, approximately 130 kilometers south-west of Abu Dhabi, in the United Arab Emirates. The Habshan complex is one of the largest gas-processing plants in the world. The expansion was designed to allow it to reach production levels of 125,000 barrels per day of condensate and 12,000 tons per day of LNG, including around 3,200 tons per day of ethane, and also to recycle an amount equal to the volume of gas produced each day back into the reservoir by means of a high-pressure gas injection system.

EPC CONTRACTOR
BECHTEL

END USER
GASCO

SOLUTIONS DELIVERED

Skema was awarded the contract for the supply of twenty-one 415V Switchgear systems/MCCs, including a total of 377 columns and 1571 withdrawable units, as well as the Integrated Protection and Control System (IPCS).

The products supplied by Skema are fully compliant with the most stringent requirements of the Oil and Gas industry, the internationally recognized Shell DEP: internal arc proof, IP 41 external protection, barriers provided in the assemblies to achieve Form 4 separation of compartments, IP 4X internal protection, IP 20 protection when a withdrawable unit has been removed from the assembly, secondary PVC-insulated 600/1000V grade wiring, stranded copper conductors (minimum size 2.5 mm²), bus bar insulation 2kV AC 60 sec, distribution bus bars (droppers) fully segregated by insulated material, contactor and starter units fully withdrawable, withdrawable units which are mechanically identical but electrically different are not interchangeable.

“I appreciate all aspects of Skema’s performance, and in particular: your team’s efforts in turning around accurate engineering documentation in a timely fashion, Skema’s proactiveness in dealing with third parties, Skema’s flexible and adaptable manufacturing approach to accommodate EBCL’s construction priorities, and Skema’s swift clear communication with the OGD-III Project team and the overall quality of Skema’s work product. Skema’s approach to the OGD-III project has been most professional at all times and its high calibre performance has been noted.”

Project Director, OGD-III



INTEGRATED PROTECTION AND CONTROL SYSTEM (IPCS)

The IPCS is based on ICUs (Integrated Control Units) located in each substation, which communicate with the motor starters and the protection relays, making all the information available for the operator workstations and the redundant servers installed in the Main Control Room, and operate as a gateway with the DCS, which sends commands and receives feedback via the TCP/IP interface.

The IPCS created for the Gasco OGD III project not only displays the status and alarms of all the components of the electrical network but also greatly assists the operators in maintaining the plant because it stores the parameter settings of all the control units (both motor managers and protection relays) and compiles the sequence of events and the disturbance waves recorded by the protection relays in case of faults.

