

SOLUTION NOTE

AURA PHOTOVOLTAIC PLANT Martifer Solar (Mexico)

SN-AURA-EN-0713

AURA SOLAR I 30 MW PHOTOVOLTAIC PLANT

Aura Solar I PV power plant is located in the Mexican state of Baja California Sur. With a total installed capacity of **30MW**, it is the **Latin American largest operational PV plant**, as of August 2013.

Aura Solar I is also the first utility-scale plant in Mexico to secure a power purchase agreement with public utility Federal Electricity Commission (CFE), and developer Gauss Energia (Mexico City) that will supply electricity to over 160,000 people and is expected to avoid the emission of more than 60,000 tonnes of carbon dioxide.

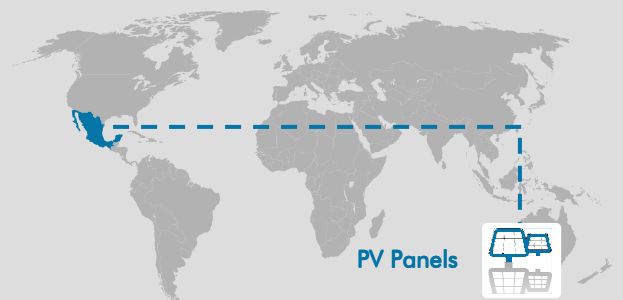
YEAR » 2013

CLIENT » Martifer Solar

LOCATION » La Paz - Baja California, Mexico

SOLUTION » Complete Distribution Network Solution

SEGMENT » Renewable Energy (RES) - Photovoltaic



ORMAZABAL ormaCONTAINER-40PV: MOBILE AND CONTAINERISED SUBSTATION FOR PHOTOVOLTAIC PLANTS

Scope of Supply:
20 ormaCONTAINER-40PV Substations
17 PV Substations of 1750 kVA
2 PV Substations of 1250 kVA
1 PV Substation of 1000 kVA



ORMAZABAL DNS SOLUTIONS:
LOW VOLTAGE AND AUXILIARY SERVICE BOARDS
INGECON SUNPOWER'S SOLAR INVERTERS INTEGRATION
AUXILIARY SERVICE 50KVA TRANSFORMER



ORMAZABAL DISTRIBUTION TRANSFORMER: REDUCED LOSSES OIL IMMERSED TRANSFORMERS

Scope of Supply:
20 Transformers of 1000 (1), 1250 (2) and 1750 kVA (17)



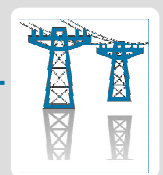
ORMAZABAL CGMCOSMOS:
SINGLE BUSBAR MV SWITCHGEAR FOR DISTRIBUTION
NETWORK SOLUTIONS (DNS)

Switchgear Type: Ring Main Unit (2LP)
Electric Data: 24 kV – 400 A – 20 kA
Scope of Supply: 20 Cubicles
Feeder + Fuse Protection (LP)



ORMAZABAL CPG.0: SINGLE BUSBAR MV SWITCHGEAR FOR SUBSTATION SOLUTIONS (SSS)

Switchgear Type: Circuit Breaker (V)
Electric Data: 24 kV – 2500 A – 25 kA
Scope of Supply: 6 Cubicles



CFE Grid

THE CHALLENGE AND THE SOLUTION

Design and construction of a large scale PV plant like AURA is always challenging for all players involved in the process. Equipment manufacturers are expected to provide their customers with safe, reliable and cost efficient solutions in order to full fill their needs. From an operational point of view the complexity and size of AURA PV plant required Ormazabal to pay special attention to the specifications and delivery deadlines communicated by MARTIFER. This project had to be managed according to a **multi-region supplier program**.

Ormazabal long experience with more than 600 PV plants installed worldwide drove the project to the goal statement. We supported MARTIFER from the first project **consultancy** up to the **commissioning** of the whole PV plant, including the **MV cables and connectors confection**.

Our proven **experience** in this type of **engineering** challenging projects helped to achieve agreed delivery deadlines.

CUSTOMER KEY BENEFITS

- Tailor made solution with short delivery deadlines
- Plug & Play philosophy for the customer piece of mind
- Local support and project management from A to Z