

Project Title

Sohar Power & Desalination Project,
Sultanate Of Oman

The Sohar Power & Desalination Project is located on the shores of the Arabian Sea proximate to the city of Sohar in the Sultanate of Oman and has been constructed to provide both electricity and potable water for the region.

The US\$408M project comprises two principal elements; a 585MW (net) gas fired combined cycle power station and an associated 6,250m³/hr desalination plant.

The power station itself comprises three 160MW Gas Turbine / Generator units and a single 220MW Steam Turbine / Generator unit. The heat from each gas turbine exhaust is recovered via one of the three Heat Recovery/Steam Generator units; these units provide the steam required to power the Steam Turbine and to operate the Desalination Plant. Diverters have been incorporated within each of the three Damper units enabling the isolation of the HRSGs while allowing the continued operation, in Open Cycle mode, of the Gas Turbine.



Sohar Combined Cycle Generation Units as seen from Desalination Plant

The Desalination Plant comprises four Evaporator Units each capable of producing

1,562.5m³ of potable water per hour; three of the units draw steam directly from the HRSGs while the fourth utilizes the exhaust from the Steam Turbine.



Internal View of Unit 3 Bypass Stack

During the commissioning of one of the three Gas Turbines an incident occurred which resulted in un-burnt gas entering the exhaust where it ignited. The resulting deflagration resulted in extensive damage to the associated Diverter Damper. The financial losses incurred by the contractor constructing the power station were significant.

ICC were retained to advise and assist in the technical evaluation of the incident; justification and presentation of the claim under the project's insurance, and determination of the claim quantum.