Soroosh Nowrooz

Process:	**Offshore Seawater Reverse Osmosis**
Client:	**Technip – Coflexip / NPCC**
Country:	**Arabian Gulf**
Site:	**Soroosh Nowrooz**
Contract Description:	**Platform Washwater Package**
Contract Value:	
Contract Date:	**April 2002**
Contract Completed Date:	**October 2002**
Capacity:	**3,400 m³ / per day**
Sea Water Conversion:	40%
Sea Water Feed Quality:	46,600mg/l (tds)
Fresh Water Output Quality:	< 800 mg/l (tds)

Project Description:
3,400 m³/day modularised SWRO wash water unit operating on an oil platform in the Arabian Gulf.

Process Description:
Seawater is pumped through downward flow type pressure vessels filled with a dual filter media of sand and anthracite. (The filters are automatically back-washed at pre-set periods to provide optimum water quality.) Final filtration upstream of the R.O. trains is provided by an array of cartridge filter vessels.
The R.O. plant comprises of three independent trains, each fitted with 132 spiral wound type membrane elements. Filtered water is supplied to the R.O. membranes by high-pressure multi-stage centrifugal pumps. The membranes convert 40% of the sea water into fresh water, the remaining water is rejected as brine.