

Huge desal plant in Yanbu to supply 15m gallons daily

10 March 2011

JEDDAH: The Saline Water Conversion Corporation (SWCC) and a South Korean company is jointly building the world's largest desalination plant in Yanbu, about 350 km northwest of Jeddah, with a capacity of 15 million gallons potable water per day. The project, to be completed by August 2012, will solve water problems in Madinah, Yanbu and neighboring areas.

Thabit bin Suwaider Allahaiby, deputy governor of SWCC for operation and maintenance, said his organization has signed an agreement with Korea's Doosan Heavy Industries and Construction in order to obtain all engineering and technical rights for manufacturing multi-effect desalination (MED) units.

He said the agreement would enable SWCC to obtain all information related to the management, designing, engineering and construction of MED plants as well as the mechanical and electrical aspects of the project. "This will improve SWCC's position from the status of a mere consumer of desalinated water, to a producer and transporter of modern technology," he said.

Allaihaiby also expressed his organization's confidence to achieve self-sufficiency in the desalination industry, establishing desalination plants using locally developed technology. He said a team of 30 well-experienced engineers has been set up to manage the huge project.

He said the project's designs have been verified by a group of King Saud University professors.

Under the agreement, Doosan will carry out engineering, fabrication, installation, commissioning and all other related scopes of work on an engineering, procurement and construction basis. Doosan said the project order displays the market's recognition of MED technology, which is growing due to low energy-consumption trends.

Doosan hopes to lead the future MED desalination plant market in partnership with SWCC. The Yanbu plant will be the largest MED plant in the world, surpassing an operation in the United Arab Emirates that can produce 8.5 million gallons a day.

Doosan and Italy's Fisia dominate the construction of multi-stage flashing (MSF) desalination facilities, while France's Sidem leads the MED market. "Doosan is already No. 1 in the world in MSF facilities, and as we have been recognized for our unique technologies when it comes to MED facilities, we now have the competitiveness of offering the most suitable facility for different locations," said Yoon Seok-won, head of Doosan's water business group.

Doosan has won a \$1.46 billion order to build another desalination plant in Ras Al-Zour in the Eastern Province. The plant will provide drinking water to the capital Riyadh and will be completed in January 2014. It will produce 1 million tons of water a day, enough for 3.5 million people.

Efforts are under way to privatize SWCC, which runs more than 30 desalt plants on the Kingdom's eastern and western coasts. The Kingdom has already started privatization of its desalination plants. It awarded an SR9.1 billion (\$2.43 billion) contract to a consortium of Saudi and Malaysian companies to set up Shuaiba-3, a dual purpose independent water and power plant (IWPP) designed to supply 194 million gallons of water daily as well as 900 megawatts of electricity.