

Diversification key to tackle rising water, power demand

By Querubin J. Miñas
Saudi Gazette Staff

JEDDAH - GE Energy calls for diversification of energy sources in Saudi Arabia as well as in the region to come to grips with the growing demand.

Stephen R. Bolze, president & CEO of GE Power and Water, said on Monday that amid ever-increasing need for water and electricity as population grows and economic development expands, emphasis should be given on investment in technologies which would lead to diverse solutions on enhancing the development of thermal renewable energy and gasification, among others.

He emphasized that ongoing research should be done locally as some opportunities emerge for innovative technologies to address the Kingdom's power and water needs.

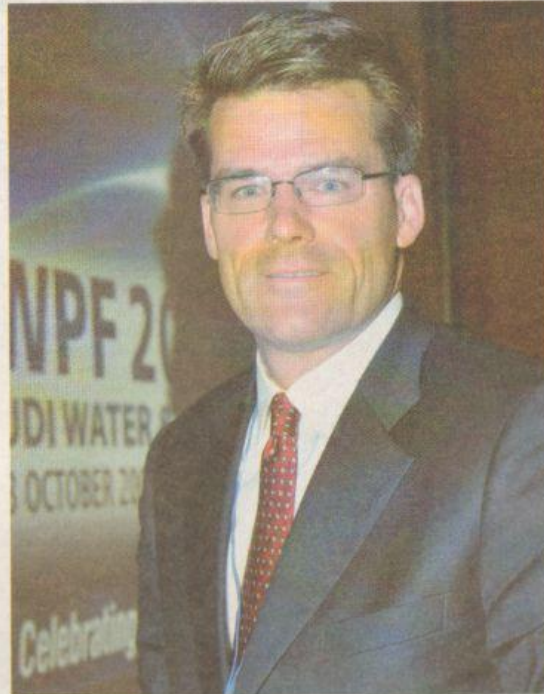
He told the Saudi Gazette on the sidelines of the Saudi Water and Power Forum here that the demand for power and water in the Kingdom will double between now and 2018, noting that at present power generation capacity is at 40 gigawatts and water production is at 3 million cubic meters daily.

There should be also a sustained focus on efficiency and critical use of natural and mineral resources in the country, Bolze noted, adding that there must be a strong support from both the private and the government sectors in the implementation of new technology.

The opening of Marafiq Power and Utility Company in the Eastern Region sometime next year will increase output capacity by 50 percent, he added.

As a showcase project in Saudi Arabia, Bolze said Marafiq is regarded as the world's largest independent water and power plant, in which GE supplied advanced technology solutions and services, including high efficiency gas turbine combined cycle systems.

The Ministry of Water and Electricity earlier forecast that



Stephen R. Bolze

the Kingdom will require up to 30 gigawatts of additional power generating capacity by 2020 as electricity consumption has been increasing at a rate of about 7 percent a year.

He encouraged further research and development to optimize the use of heavy fuel oil which remains an important fuel source for some industries.

This low-grade carbon and sulfur-intensive petroleum product is burned in quantity for thermal-electric power generation, for heating boilers and furnaces in some manufacturing industries and in petroleum refining industry.

In the case of water, GE's expertise in water reuse further strengthens its position, with robust solutions that can restore wastewater to high quality and dramatically reduce demand on

potable supplies.

Bolze cited GE's \$10-million technology center and blending plant for water treatment chemicals in Dammam as an example. Named the General Electric (GE) Saudi Water & Process Technology Center, the 7,500-square-meter facility is a joint undertaking with Saudi Arabian engineering and construction firm Al-Tamimi Group. The facility will also offer advanced water solutions, water reuse, and wastewater and process solutions to local and regional customers.

While reaffirming GE's continuous commitment in the furtherance and diversification of Saudi Arabia's energy sources, Bolze moreover said that an "ongoing stable policy for the development of new technologies in the long run" is equally needed. Investment incentives should be

in place, he added.

As a world leader in breakthrough technology, he also said that GE is always on the cutting edge of gas turbine technology offering the widest range of heavy-duty gas turbines available.

Besides, he underscored the importance of heavy oil gasification, saying that GE presently can gasify certain types, but "there is wide variety that can be developed over time."

Bolze stated that GE is working closely with both the government and private sector to develop and implement new technology, adding that GE "is participating in all projects" in the Kingdom and "continues to support" the country in achieving those objectives.

As part of its knowledge-sharing commitment to Saudi Arabia and the region, GE is collaborating with several Saudi Arabian educational institutions, including King Abdullah University of Science and Technology, King Fahd University of Petroleum and Minerals, to develop academic programs that feature targeted curriculums, internships and cooperative learning experiences.

Commenting on Green technology, Bolze said GE's Ecomagination sustainability program (launched in 2005) demonstrates its pledge to making the company a more responsible corporate citizen by balancing its economic, social and environmental objectives, and creating products that would meet the environmental challenges of the future.

Building on GE's active participation in Saudi Arabia's infrastructure growth for the last 80 years with a successful track record for providing tailored, cleaner, energy-efficient power and water solutions to both public and private sector partners in the Kingdom, Bolze said the company stays "committed to continue working with our partners to meet the current and future energy demands of Saudi Arabia."