

Saudi Arabia, France to Conclude Nuclear Cooperation Pact

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On July 5, 2010, the Saudi Press Agency reported that Saudi Arabia approved its conclusion of an agreement with France on cooperation in the peaceful use of nuclear energy. On the nuclear cooperation agreement, French President Nicolas Sarkozy first made a proposal to Saudi King Abdullah in June 2007. A draft agreement was presented for consideration when President Sarkozy visited Riyadh in January 2008. The SPA report fell short of discussing details of the agreement or giving any specific schedule for the conclusion. No follow-up report has come out. The two countries are expected to iron out details of the pact from now on. Saudi Arabia's growing interest in nuclear power generation has been well known among energy experts in the world. Saudi Arabia's planned agreement with France follows its nuclear cooperation pact with the United States signed in May 2008.

It may be needless to say that Saudi Arabia has the world's largest oil resources (proven at 264.6 billion barrels accounting for 20% of the global total as of 2009) and is one of the world's largest oil producers (Saudi oil output at 9.71 million barrels per day in 2009), although Russia replaced Saudi Arabia as the largest oil producer due to the OPEC nations' coordinated production cuts in 2009. It is also the dominantly top oil exporter (with net exports at 7.1 million bpd in 2009). Why is such country introducing nuclear power generation?

The largest reasons are fast-increasing oil demand in Saudi Arabia and a fear of a relevant drop in its oil export capacity. Saudi oil consumption expanded 9.8% from the previous year to 2.61 million bpd in 2009 after growing at an average annual pace of 6.8% over five years from 2004, indicating a rapid increase in oil demand. Factors behind the growing oil demand include (1) vigorous economic growth supported by oil exports, (2) robust population growth (population increased from 22 million in 2003 to 25 million in 2008), and (3) subsidies to limit petroleum products and energy prices to low levels (the average gasoline price in 2008 stood at \$0.14/liter). All of these are structural problems to which no easy solution can be found.

A simple computation indicates that if oil consumption in Saudi Arabia grows from the 2009 level at the same annual pace of about 7% for the past five years, its consumption will reach to

a level of 10 million bpd around 2030. If Saudi Arabia maintains its oil output at the present level, its oil export capacity then may fall to zero. Such phenomenon indicated by a simple computation may not actually occur. Nevertheless, fast-increasing oil consumption in Saudi Arabia is well expected to gravely affect its oil exports, the core of the Saudi economy, over a medium to long term. When I exchanged views with a large number of experts during my recent trip to Saudi Arabia, I really felt that concerns about the possibility were actually present and growing more serious.

Therefore, Saudi Arabia is seriously trying to hold down oil (and natural gas) consumption and introduce alternative energy sources. It has great interests in energy conservation measures and experiences in Japan as a forerunner in energy conservation. Sufficient conditions exist for Japan's cooperation with Saudi Arabia in energy conservation. Saudi Arabia also has growing expectations on and interests in nuclear, solar and other renewable energy sources as alternatives to oil. As demand for oil (including crude oil) as fuel for thermal power generation has been substantially increasing to meet expanding electricity demand in Saudi Arabia, nuclear energy is considered as a means to reduce and replace oil demand. We may also have to pay attention to Saudi Arabia's long-term efforts to diversify and advance its economic and energy structures, as well as its rivalry with the United Arab Emirates that has taken a lead over Saudi Arabia in introducing nuclear energy by deciding to place a \$40 billion order with a South Korean consortium for four nuclear reactors in late 2009.

Saudi Arabia's move to sign a nuclear cooperation agreement with France following a similar pact with the United States indicates that the oil-rich kingdom is deepening cooperative relations with forerunners in nuclear power generation and developing systems to introduce nuclear power generation. The move is consistent with Saudi Arabia's announcement in April 2010 on the creation of the King Abdullah City for Nuclear and Renewable Energies, a new organization to undertake research and development of nuclear and renewable energies.

Meanwhile, discussions on and interests in the international nuclear power generation business have been growing in Japan. On July 12, Toshiba Corp. announced its agreement with U.S. power generator Exelon Nuclear Partners and the Shaw Group, a U.S. construction engineering giant, to make a joint nuclear program proposal for Saudi Arabia. This typically indicates a quick business action in the private sector. But private sector companies' expansion into Saudi Arabia and other countries planning to introduce nuclear power generation may be accompanied by various problems and risks, indicating that national efforts may become important for promoting nuclear technology and equipment sales to these countries. As part of such efforts, electric power companies and nuclear plant makers in Japan are preparing for founding International Nuclear Energy Development of Japan Co. in the autumn of 2010. Expectations have grown on its roles and functions. In an approach to important resource-rich countries like Saudi Arabia that must be based on comprehensive energy strategies and resources diplomacy, the government can play an important role. Japan may be required to understand needs in business target countries (like Saudi Arabia) and to take advantage

of its superiorities to build win-win relationships with these countries from comprehensive viewpoints.

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