Special Bulletin

September 9, 2010

A Japanese Perspective on the International Energy Landscape (10)

Germany Revises Nuclear Power Phase-out Policy and Extends Plant Operations

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On September 5, the German coalition government led by Chancellor Angela Merkel announced a basic policy decision to revise an earlier plan for terminating operations of all nuclear power plants by around 2022 and to extend operations of the 17 existing nuclear reactors. According to the decision, seven reactors built in or before 1980 will extend operations for eight years and 10 newer reactors for 14 years. On average, nuclear reactor operations will be extended for 12 years. The basic policy decision represented an about-face for Germany, which had sought to terminate nuclear power generation under the policy of phasing out operations of existing nuclear power plants.

The nuclear power phase-out policy was originally decided on by the previous administration that then Chancellor Gerhard Schroeder inaugurated as a center-left coalition (between the Social Democratic Party and the Green Party) in 1998. The policy had been implemented through the government's agreement with the electric power industry in 2000 and the effectuation of a revised nuclear power law in 2002. When the agreement with the electric power industry was reached, 19 nuclear power reactors were in operation. The government then set a ceiling on nuclear power generation at 2.623 trillion kWh and allowed electric power companies to continue nuclear power plant operations under the ceiling with economic efficiency in mind and gradually terminate the operations to achieve the nuclear power phase-out. Under the phase-out policy, Germany terminated operations of two reactors – in Stade (2003) and Obrigheim (2005).

But the nuclear power phase-out policy has been lingering as one of the controversial problems regarding energy, environmental, economic and industrial policies in Germany. When the Christian Democratic Union and the Social Democratic Party formed a coalition under Chancellor Merkel to replace the center-left coalition through an election in 2005, behind-the-scene coordination of views about the nuclear power phase-out policy took place. But the then new coalition government eventually maintained the policy. Through an election in September 2009, however, the CDU and the Liberal Democratic Party formed a center-right coalition, causing discussions again on whether the nuclear power phase-out policy should be revised. In fact, Chancellor Merkel took an attitude of specifying the importance of nuclear power plants' extended operations during campaigns for the election.

The policy about-face came as Germany was apparently searching an answer to a big question of how the 3E (environmental, economic and energy) policy goals should be achieved simultaneously. The simultaneous achievement of the maintenance and enhancement of the economy

and industrial competitiveness in Germany as the largest European economic power, the stabilization of energy supply and the positive reduction of greenhouse gas emissions has been an important challenge in Germany. Discussions on the challenge in Germany have focused on how to treat nuclear power plants (or whether to revise the nuclear power phase-out policy). In a sense, Germany has made its answer to the big question amid the "nuclear renaissance" that has been growing in the world and Europe to take a new look at the importance of nuclear power generation.

Germany must secure cheap, stable energy/electricity supply to enhance its economic and industrial competitiveness, while building the energy supply/demand structure to allow greenhouse gas emissions in 2020 to be reduced by 40% from 1990. Behind the nuclear power phase-out policy, renewable energy sources including wind power and solar energy had been expected to spread substantially and contribute to the policy goals. But concerns have grown over energy (electricity) cost hikes amid the expansion of renewable energy uses and over characteristically intermittent supply of renewable energy sources. Furthermore, doubts have emerged about whether renewable energy power generation could be expanded to replace nuclear power generation accounting for more than 20% of electricity supply in Germany. Then, the German government has decided on the extension of nuclear power plant operations apparently as a realistic solution. As Germany is set to adopt a new energy strategy initiative by late September, the nuclear policy about-face may be positioned as one of the key points for the initiative. But Chancellor Merkel still gives top priority to the promotion of renewable energy sources as a long-term policy. She has made remarks indicating that nuclear energy should be given priority as a bridge to the full-fledged introduction of renewable energy sources.

Efforts to simultaneously achieve the 3E policy goals are also indicated by a plan to introduce a new tax on additional profit that the electric power industry would acquire on the extension of nuclear power plant operations. The industry is expected to earn unexpected windfall profit by taking advantage of extended operations of existing nuclear plants to secure electricity supply through economically excellent nuclear energy and avoid investment in new power sources and costs for additional fossil fuel procurement. The government plans to introduce a nuclear fuel tax on the windfall profit and incorporate the relevant tax revenue (estimated at 2.3 billion euros per year) into general financial resources. Although E.ON AG and other electric power companies are opposed to the new tax scheme, the government expects to secure cheap, stable electricity supply (that contributes to industrial competitiveness) and financial resources for contributing to the Germany economy. In addition, the government reportedly plans to require the electric power industry to contribute 300 million euros in 2011 and 200 million euros per year between 2012 and 2016 to a special fund for the promotion of renewable energy sources. We may view the government as attempting to make simultaneous approaches on energy, environmental and economic policies through the nuclear policy about-face.

The German decision to extend operations of nuclear power plants can thus be interpreted as being of great significance as a proposal regarding the simultaneous achievement of the 3E policy goals. But there are some uncertainties about the policy about-face. We must take note of this point. According to German polls, German citizens are divided over the decision to extend operations of nuclear power plants. The SDP, the Green Party and environmental organizations, known for their anti-nuclear attitude, have raised objections to the decision. As media reports indicate large-scale anti-nuclear demonstrations planned for mid-September, we must pay attention to the trend of public opinion. The government reportedly plans to bring the cabinet decision to a vote only in the Bundestag lower house and avoid a vote in the Bundestat upper house where opposition parties control a majority. Opposition parties have raised objection to the decision and are planning to take counteractions including a lawsuit to be filed with the Constitutional Court. Furthermore, Germany plans to hold the next parliamentary election by 2013, indicating that another policy about-face, harsh debates and tough adjustments may emerge depending on election results. In the future institutional design process, meanwhile, the government may have to coordinate views with the electric power industry and the like over the above-noted new tax scheme and renewable energy promotion fund. We may have to carefully watch and analyze the future development of the latest important change in Germany as one of key moves regarding nuclear power generation in the world.

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