The Strategic Challenge of Capacity for German Decommissioning

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Experience of decommissioning across the world has allowed the nuclear industry to develop and enhance most of the technologies required for safe and efficient dismantling of Nuclear Power Plants (NPPs). One strategic challenge confronting the industry now is how to scale up implementation to address the burgeoning demand for dismantling of full size NPPs during the period 2016-2040. The German decommissioning programme will provide early evidence of whether the European industry can rise to this strategic challenge.

It is widely reported in the media that German utilities will spend some €30-40Bn decommissioning NPPs during the next 25 years. In total, 22 NPPs will progress through the typical three stage programme encompassing post operations, dismantling and site clearance, with a peak occurring in the 2020s. Politically, immediate dismantling is strongly preferred as the strategy for the NPPs, so there will be a surge in decommissioning expenditure starting as soon as 2017. A critical issue is whether the German nuclear industry has sufficient capacity to deliver the programme, and where utilities may seek participation by other European companies.

Innovation may be required, perhaps at a non-technical level. The circumstances of the German market require a thorough understanding. While the market is apparently open and receptive to international participation, three factors make it hard for foreign companies to penetrate. The political and regulatory environment is tough and for many foreign companies difficult to understand quickly. Utilities are mostly pursuing self-perform decommissioning strategies to preserve employment for their skilled workforces, limiting scope for some contractors. Finally, an innovative and highly experienced German nuclear industry can present formidable competition. Yet, this industry does not possess all the capacity needed for the utilities’ programmes. Risks for new entrants can be mitigated by smart partnering strategies with German players looking for allies. Language, cultural and political barriers can all be overcome with the right approach. This paper will address potential strategies for European industry players seeking to participate.

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