

## **Financial and Legal Compliance Challenges of the Nuclear Power Plant Development in the European Union**

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Nuclear power plant construction complexity comes from a wide range of engineering, economic, environmental and legal considerations. Nuclear safety and security is in the spotlight while the feasibility of the economical operation is questioned in the light of the transforming energy industry (for instance new energy storage technologies and the unfolding of the household-scale renewable solutions). These innovation factors could be hard to measure in the case of the nuclear generation project investments which have large fix costs upfront with a planned lifetime exceeding 50 years. Recent nuclear related constructions in the European Union (EU) are also facing with the legal challenges regarding sustainable financing and the requirements of the energy union.

The latest development in the case of nuclear power plant licensing is the decision of the European Commission regarding the “Paks 2” nuclear power plant financing in Hungary. These generation 3+, pressurised water reactor type units, each with a gross capacity of 1200 MW, are planned to be commissioned by 2025 and 2026. Most recently, the legal obstacles and concerns raised by the EU has been removed as the Commission finally approved the proposed nuclear power capacity development. However, only with serious state aid and competition law restrictions: the EU approval prohibits any further capacity increase to be financed from the profit - just the investment (capital cost) and normal operation costs might be covered by it. Further, the new project should be legally unbundled from the existing operator of Paks 2 nuclear power plant, thus the EU Commission created such a regime quite familiar in the EU energy policy (see the unbundling rules of the TSOs), however, not necessarily common in state aid law. The European Commission also requires that 30% of the new production to be sold on the power exchange whilst the remainder on transparent tenders.

Observing these, the main question for us is whether these rules may also be at least indicative legal compliance milestones for planning new nuclear capacity developments all across the EU or, in light of EU state aid law tendencies, represent only a rather unique exception.

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