Nuclear New Build in the United States 1990-2010: A Three State Analysis

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This research identifies key lessons over the period 1990-2010 from the nuclear energy sector which can enhance the conditions needed for new nuclear build. The research demonstrates the evolution of the nuclear industry in the US, which has taken the form of incremental change. The methodology identifies key assumptions within the nuclear sector in the US that are contested, and delivers lessons on how these contested issues may be resolved. The paper adds to the literature in public administration, legal development and nuclear energy policy, and in particular nuclear new build.

In particular, the paper advances research in nuclear energy policy in adding to the limited research that focuses in particular on nuclear new build. It contributes a three state study. While no nuclear new build has occurred in the US over the period 1990-2010, the industry has nevertheless been active. Capacity has been increased at existing nuclear plants, licences to extend reactor lifetimes have been applied for and plans are firmly developed in Georgia for two units at an existing facility (Plant Vogtle). However, as the industry is on the verge of a nuclear new build project for the first time in this period, the research identifies a number of policy areas that would facilitate growth of the sector should they be reviewed. The research provides these new insights through a unique comparison of US states which have deregulated, regulated and ‘hybrid’ electricity markets.