

| Risk Type | Postulated Event | Likelihood Influences | Potential Effects |
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| Regulatory | Legal challenge on the grounds of absence of firm plans for a radioactive waste disposal facility. | Technical case for a disposal facility has been made, but siting depends on candidate communities volunteering. Challenge will be likely if the sole candidate pulls out or if serious doubts arise as to the suitability of this location. Precedent (Sizewell 'B') exists for new nuclear construction without waste route. | Delays to construction and start of generation. Challenge may be made/upheld <u>too late for gas-fired</u> alternatives to be constructed in time, resulting in electricity supply shortage . |
| Regulatory | A major nuclear incident or accident (anywhere in the world) results in a strong shift in public opinion against nuclear. | Opinion-forming nuclear incidents are rare (about one per 20 years worldwide). Candidate designs are PWR type (deployed worldwide), so safety concerns are likely to be seen as relevant to the UK. <i>Fukushima incidents are the result of extreme natural hazards not affecting the UK. Reactors are BWR not PWR.</i> | Loss of political consent for construction (delayed at least until power shortages reverse change in policy). Incident may occur <u>too late for gas-fired</u> alternatives to be constructed in time, resulting in electricity supply shortage . <i>Very negative media coverage may lead to political response early enough to plan alternative generation and avoid electricity supply shortage.</i> |
| Regulatory | Planning objections to temporary facilities for construction, which are beyond the scope of national planning (via IPC/MIPU), so are subject to the normal local planning process. | Objections may be raised at all proposed sites by anti-nuclear pressure groups, or by local parties at specific sites (not necessarily nuclear). | Delays to construction and start of generation due to need to design alternative temporary facilities. Objections are unlikely to be late in the process or to affect more than a few alternatives to nuclear, so are unlikely to result in electricity supply shortage. |
| Regulatory | Delays to the Localisation Bill (which includes MIPU) result in stalemate in the planning process. | The Localisation Bill includes changes to the powers of local and regional authorities that are likely to be controversial and to delay passage through Parliament. | Delays to construction and start of generation. The planning arrangements are required for many major infrastructure projects <u>not specific to nuclear</u> , so could result in electricity supply shortage . |

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| Regulatory/ Financial | Additional safety measures required by regulators add unknown cost to nuclear stations and deter investment. | GDA process deals with major safety issues, but some issues remain unresolved or were excluded from GDA scope. | Any problems are likely to become apparent very early in construction phase, allowing time for construction of gas-fired alternatives, so are unlikely to result in electricity supply shortage. |
| Financial | Delays to the Government's electricity market reforms, and consequently to decisions whether to invest in new nuclear generation. | EMR consultation closes this week. Popular concerns likely regarding cost to consumers. | Lack of timely investment should be apparent early enough to allow construction of gas-fired alternatives, so is unlikely to result in electricity supply shortage. |
| Financial | Long timescale for ROI combine with economic uncertainty to undermine investor confidence. | Political recognition of need for new generation capacity makes this sector attractive to investment, particularly in view of uncertainties elsewhere. | Lack of timely investment should be apparent early enough to allow construction of gas-fired alternatives, so is unlikely to result in electricity supply shortage. |
| Financial | Short-term lack of investor confidence in nuclear projects combine with long-term decline in economic case for gas, leading to lack of investment across the whole energy sector. | Decline in UK production makes gas more vulnerable to price spikes due to global market events. | Reluctance to invest in gas-fired alternatives may escalate consequences of other events listed here, resulting in electricity supply shortages , even if the problems are nuclear-specific and/or detected early. |
| Financial | Multinationals divert effort to other countries where conditions for major infrastructure investment are more attractive, or to home countries. | China and India seen by AREVA (and Westinghouse?) as prime targets for marketing new nuclear. Home demand less due to predominantly low-carbon generation in France and political rejection of carbon reduction in USA. | Construction will not start without contractual commitments. Any issues will be apparent early enough to allow construction of gas-fired alternatives, so will not result in electricity supply shortage. |

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| Feasibility/ Financial | Construction cost and schedule overruns on predecessor projects undermine investor confidence. | Evidence that EPR construction is learning lessons from Olkiluoto and Flamanville, and that the delays there are due to classic first-of-a-kind problems. | Construction will not start without contractual commitments. Any issues will be apparent early enough to allow construction of gas-fired alternatives, so will not result in electricity supply shortage. |
| Feasibility | Competition from other large (non-energy) projects draws away suppliers and manpower resources. | Political recognition of the need for new generation capacity makes this sector attractive to suppliers and job-seekers, particularly in view of uncertainties elsewhere. | Problems may become apparent <u>too late for gas</u> -fired alternatives to be constructed in time, resulting in electricity supply shortage . |
| Regulatory/ Feasibility | Delays to construction due to design changes arising from regulatory requirements. | GDA process deals with major safety issues, but some issues remain unresolved or were excluded from GDA scope. Regulators are aware of the need to resolve issues early. | Any problems are likely to become apparent very early in construction phase, allowing time for construction of gas-fired alternatives, so are unlikely to result in electricity supply shortage. |