

RSGS Magazine Article (700 words)

An Independent Scotland and Nuclear Energy: A Forgotten Issue?

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Two issues continue to dominate the political and legal landscape of an energy independent Scotland: renewables and oil and gas. Geography and geology unite to produce an irresistible combination, or flatter to deceive depending on your viewpoint. Yet, whilst analysts mull over claim and counter-claim, one issue of geopolitical importance remains for Scotland, the nuclear question. Often tied up with demilitarisation and Trident, domestic electricity generation from nuclear power is perceived to be a *fait accompli* in the Independence debate. Surely 'Yes Scotland' and 'Better Together' have united in saying 'no' to domestic nuclear generated electricity? We ask here what 'no' actually means, and whether it is indeed possible.

Scotland is no stranger to nuclear energy provision. Since the late 1950's nuclear has played a superlative role in Scotland's energy mix, with a total of 6 reactors providing consistent base-load energy, which, even now, provide around 34% of our energy needs. From Chapelcross, Hunterston A, Hunterston B, Torness, East Kilbride and the famed Dounreay, nuclear has played a fundamental role in keeping Scotland's lights on. But nuclear's card is marked. Under Scottish Nationalist Party (SNP) rule, nuclear has fallen firmly out of favour, as they state in no uncertain terms that there's to be no further nuclear development. This despite increasing support for nuclear over the border, with plans for a new reactor at Hinkley Point C. Instead, the partially devolved Scottish Government, which controls its own planning and infrastructure, holds ambitious targets to supply 100% of electricity consumption in Scotland from renewable energy by 2020. For current reactor facilities this signals the end of an era, as all Scottish reactors face increasingly frequent maintenance outages and the threat of imminent decommissioning. Without renewal, all of Scotland's nuclear capacity is set to 'dry up' by 2035. The challenge of renewing Scotland's energy mix, therefore, has never been more pressing. In the midst of these challenges, and with some disquiet surrounding the achievability of Scotland's renewable aims, the role of nuclear is increasingly called into question.

The main challenge is that a devolved power, for example Scotland, has no competence over nuclear energy installations, yet it has full competence in respect to environmental matters and planning. The Scottish Government has rejected the idea of deep geological disposal facility (GDF) and new nuclear build. However, this does not answer the question of what happens to radioactive waste at Scottish Nuclear sites and the legacy waste Scotland currently stores at Sellafield in Cumbria. This issue, whilst it has long been acknowledged, has been further intensified by the Scottish Independence campaign and, as Cameron states: "*there is therefore a mesh of vertical and horizontal lines of authority that will impact upon policy implementation*" (December 2013).

If Scotland gains independence from the UK the waste must return to Scotland where there are neither facilities nor legal framework in place to deal with the problem. Further, will it be necessary to develop a new legal framework in which the Scottish taxpayer is liable for their share of the cost of keeping the waste in England? Considering, that the UK has not yet enacted any legislation directly concerning nuclear waste, the problems created by Scottish Independence, or in what seems to be the likely minimum outcome, near complete devolution, are a real dilemma.

The UK is advancing its own policy in the area but the Scottish Government has yet to fully engage with this issue in the debate on independence. An independent Scotland would need its own independent nuclear waste storage facility and in having a reduced number of nuclear energy plants, would not benefit from economies of scale. Moreover, the timescales in question mean that the existing Scottish nuclear power sites will be decommissioned before any robust interim storage facility or GDF would be built. This inevitably has the potential to become a real challenge for Scotland in the near future.

There is need, therefore, to more thoroughly and openly tackle the true role of nuclear in an independent Scotland, and to acknowledge its often-sidelined implications. The knowledge that Scotland is simultaneously dependent on nuclear, wary of nuclear, and ill-equipped to deal with nuclear independently signals real trouble ahead. Nuclear is an issue that we best not forget.