

STROUD GREEN PARTY

WASTE NOT, WANT NOT THE FUTURE OF RADIOACTIVE WASTE AND NUCLEAR SAFETY IN GLOUCESTERSHIRE

JOHN H LARGE - LARGE & ASSOCIATES, CONSULTING ENGINEERS

26th September 2013, 7.30pm - Old Town Hall, The Shambles, High St, Stroud GL5 1AP

In 1985 the House of Commons Environment Select Committee received evidence on the UK's mounting stockpile of radioactive waste.¹ The Committee considered the present stockpile and future arisings of nuclear waste, its radiotoxicity, how much it was costing and, most of all, what to do with it. The Committee recommended the government of the day to take action along a number of lines, including outlawing for good the practice of sea dumping; phasing out radioactive discharges to the marine environment hitherto justified by a presumption of effective dilution and dispersal; and for government to implement a determined and planned approach to establishing the best environment options for the long term storage and eventual ultimate disposal of the radioactive waste stockpiles. Most of all the Committee strongly urged Government to take these actions immediately and not to further pontificate and delay.

Many, at the time, welcomed these recommendations viewing the Environment Committee's approach to be a 'greening' of national government, even to the extent that it was the new age of Gaia.²

However, today three decades following the Environment Committee's recommendations little has changed other than, that is, the formation and subsequent abandonment of a national radioactive waste executive,³ successive committees that have become bogged down by their own ineptitude,⁴ and the formation of the Nuclear Decommissioning Authority that is charged with delivering a solution to the radioactive waste legacy at a rising cost to the nation of, it is now reckoned, about £100 billion. In the interim period, various schemes for decommissioning defunct nuclear facilities have been trialled but have all foundered; sites for on- and near-surface radioactive waste storage schemes, like the proposed deep disposal repository, have been nominated, evaluated and rejected; and there is no central government policy on the future for irradiated fuel reprocessing which is reckoned to give rise to about x100 increase in the volume of waste requiring contained and secure management in the longer term.

Yet, out of the ashes of all of this failure to deal with the 'back-end' processes and products of the civil and military nuclear industries now rises the phoenix of a tranche of new-build nuclear power plants (NPPs) to be commissioned in the UK over the next two decades. When promoting the cure-all virtues of nuclear power, ranging from diversity of power supply to arresting climate change, those for this nuclear expansion turn a blind eye to past performance, particularly that relating to the secure management of radioactive waste, going so far as to completely disengage the new Generation III NPPs from any possibility of nuclear accident and severe radiological consequences, that is airbrushing out from recent memory both Chernobyl and the recent Fukushima Daiichi accident that led to the melt-down of three nuclear reactor fuel cores and continuing radiological release today.

John Large⁵ will give his assessment of the present UK national situation applying this in particular to the existing Oldbury Magnox station and to the Generation III NPP proposed at the adjacent Shepperdine site. The fully illustrated presentation will consider the options for existing and future operational and decommissioning wastes arisings at both sites; how the quantity and dispersion of this waste might be enormously increased and spread in the event of an accident and, in preparation for an accident, the adequacy of the measures to be implemented in the short-, interim- and longer terms under the present off-site emergency planning regimes.

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¹ The Environment Committee, Radioactive Waste, Session 1984-85 – see evidence of Large & Associates at Appendix 41, Appendix 43 and unpublished evidence on Secrecy in the Nuclear Industry.

² Lovelock, James (1995) [1988]. Ages of Gaia. Oxford University Press.

³ Nuclear Industry Radioactive Waste Executive (NIREX), 1985 to 2006

⁴ Radioactive Waste Advisory Committee (RWMAC), Committee on Radioactive Waste Management (CoRWM) –Large J H, <u>Carry on at CoRWM</u>, Nuclear Engineering International March 2005

⁵ John H Large is a Consulting Engineer, Chartered Engineer, Fellow of the Institution of Mechanical Engineers, Graduate Member of the Institution Civil Engineers, Learned Member of the Nuclear Institute, and a Fellow of the Royal Society of Arts. From the late 1960s through to the late 1980s John Large was a full-time member of the academic staff at Brunel University where he completed research into nuclear applications for the United Kingdom Atomic Energy Authority. In the late-1980s, he founded and headed the Large & Associates, Consulting Engineers specialising in nuclear technology and its applications. John Large and Large & Associates have been engaged by a number of overseas states and agencies, including the New Zealand Government, the Governments of Gibraltar, South Korea, Italy, Bulgaria, the Russian Federation, the Republic of Ireland, The States of Jersey, Finland and other, including the European Union to which he has presented an intervention and conference paper on the radiological incident at Fukushima Daiichi. His most recent work has been with the preparation and delivery of evidence against the continuing operation of the Units 2 and 3 San Onofre NPP which, following legal judgments, the operator Southern California Edison permanently shut down both units. In 2001 John Large was awarded a commemorative medal by the Russian Federation authorities for his contribution to the salvage of the sunken nuclear powered and armed submarine *Kursk*.