

# **Cut the nuclear deficit**

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## 1. Introduction

1.1 One important aspect of cutting public expenditure that has so far received inadequate attention is the reductions that can be made in existing, and particularly planned, expenditure on the 'nuclear financial deficit' ie the unnecessary subsidies and spending plans for both military and civil nuclear initiatives.<sup>1</sup> Rather than callously cutting to the bone the UK's vital social infrastructure the Chancellor should axe the renewal of Trident plus the proposed 8 new nuclear power stations thus eventually saving over £100 billion.

1.2 It is often claimed that the longer term proposals for cuts are to ensure a more secure future for the country. But one of the surest ways to achieve that is the eventual removal of both nuclear weapons globally and nuclear power – as the route whereby states have developed nuclear weapons and terrorists might gain access to them in the near future. Cutting all future investment in the UK's nuclear weapons and nuclear power would be a significant concrete step down the road to such a nuclear free future worldwide.

1.3 The urgency of this agenda has recently been made clear by the potential for cyber warfare to disrupt control mechanisms of large infrastructural projects.<sup>2</sup> That could lead to a hacker-induced equivalent of Hiroshima or Chernobyl.

## 2. Why getting rid of the Trident nuclear WMD system is necessary

*"[The Nuclear Non Proliferation Treaty Review Conference of May 2010] was an important milestone in our long-term vision for a world without nuclear weapons."*

Alistair Burt, Foreign Office minister responsible for counter-proliferation, on the outcome of Nuclear Non Proliferation Treaty (NPT) review Conference, 3-28 May, at the United Nations in New York<sup>3</sup>

*"Some of the work confronting us will not be completed during my presidency. Some, like the elimination of nuclear weapons, may not be completed in my lifetime.... We cannot tolerate a world in which nuclear weapons spread to more nations and in which the terror of a nuclear holocaust endangers more people. And that's why we've begun to take concrete steps to pursue a world without nuclear weapons ...."*

President Obama, State of the Union Address, US Congress, 27 January 2010

2.1 An increasing number of political figures are now in favour of moving towards nuclear disarmament, importantly including old cold warriors such as former US Secretaries of State, Henry Kissinger and George Shultz - in their seminal article with former US Defence Secretary William Perry - and former US senator and chairman of the Senate armed services committee, Sam Nunn, in the *Wall Street Journal* nearly four years ago.<sup>4</sup>

2.2 Despite these encouraging calls for a future free of nuclear weapons David Cameron told the Tory Party Conference in Birmingham:

*“... we will renew our nuclear deterrent based on the Trident missile system.”*

2.3 He was echoed with the same commitment to Trident renewal by Defence Secretary Dr Liam Fox and Foreign Secretary William Hague in Tory Party conference speeches on the same day.<sup>5</sup>

2.4 It is remarkable that the Strategic Defence and Security Review (SDSR) initiated in May by the Coalition Government has excluded the renewal of Trident from its agenda. The House of Commons Defence Committee criticised this decision. CND general secretary Kate Hudson perceptively pointed out:

*“It is a nonsense to undertake a once-a-decade strategic review but to exclude the single most expensive programme – Trident replacement – from it. In reality, the Treasury decision that Trident should be paid for out of the MoD main budget means everything in the SDSR is dependent on the Trident decision. Billions spent on a new generation of nuclear weapons are billions made unavailable for frontline units, aircraft carriers or cybersecurity.”<sup>6</sup>*

2.5 A year ago a Greenpeace investigation, *In the Firing Line*, was published, revealing evidence that Trident replacement will have a lifetime cost of £97bn.<sup>7</sup>

2.6 No comparably detailed assessment has been published since. As costs historically have always increased in nuclear weapons programmes, it is a reasonable assumption that the Trident renewal programme will cost over £100 billion.

2.7 The Greenpeace report showed that the government gives two figures for replacing Trident.

- The cost of designing and building new submarines, warheads and ‘infrastructure’. This was said in 2006 to be £15–20bn and to take up 3% of the defence budget every year between 2012–27.
- The running costs, which will take up around 5–6% of the defence budget (approximately £1.9–2.3bn) every year. This gives a total of £72.9–89.5bn for building and operating a replacement for Trident.

2.8 Yet these estimates ignore key factors – factors which Greenpeace believes will push the final cost up to £97bn, or more than 8.5% of the defence budget every year over the system's 30-year lifetime.

2.9 Examples of hidden costs include:

- The estimated £900m cost of conventional military forces directly assigned to support the nuclear force that should be included in Trident running costs.
- The £250m costs of extending the life of the current Trident missiles.
- The estimated £3bn cost of buying next-generation missiles when the Trident missiles are ultimately withdrawn from service midway through the life of the replacement submarines.
- A percentage of the substantial cost of modernising the Atomic Weapons Establishment (AWE) at Aldermaston – a modernisation that is in large part necessitated by the requirement to develop new warheads for the new Trident system.
- The multi-billion pound research programme at the Atomic Weapons Establishment has received an additional £1bn of government funding, and this level of “additional investment” is set to continue until 2013, according to a written ministerial statement by the last government in September last year.<sup>8</sup>

### **3. Why nuclear power is costing the earth**

3.1 Just as the ever escalating cost of nuclear weapons makes a period of budgetary austerity an opportune time to get out of the nuclear arms race, it is equally an appropriate time to ensure that cuts in future public expenditure can take place by dropping plans to build new nuclear power stations. This means there will be no necessity for longstanding, taxpayer subsidy for new civil nuclear power.

3.2 Indeed, it has become the mantra of ministers in the coalition Government both in Parliament and in public meetings, and in media interviews, to insist no subsidies would be provided to new nuclear power plants under their governance. For example, on 17 June Chief Secretary to the Treasury, Danny Alexander told Parliament:

*"As to the nuclear industry ... the coalition agreement commits us to no public subsidy for nuclear power."*

3.3 Yesterday (18 October 2010), the Energy and Climate Change Secretary Chris Huhne reconfirmed the government's position, saying there would "no public subsidy for new nuclear power". Yet in the same announcement, he went on to admit "...we are not ruling out action by the Government to take on financial risks or liabilities for which it is appropriately compensated or for which there are compensating benefits."<sup>9</sup> He also announced that he would introduce a fixed unit price for waste disposal costs, a process which is likely to form a further subsidy.

3.4 Yet, a report on *Nuclear Subsidies*, produced last year by the independent Energy Fair Group<sup>10</sup>, details a range of historic subsidies for technology research and development, radioactive waste management and skills development. Some of these will also support nuclear new build, as DECC says it plans to continue with existing subsidies, even if they provide secondary support for new reactors.

3.5 The most significant, but ultimately unquantifiable, subsidy enjoyed by nuclear operators is the limitation on liability in post major radiological accident situations. A variety of government estimates from the 1990s, have put the cost of the 1986 Chernobyl accident, over two decades, at hundreds of billions of dollars.<sup>11</sup>

3.6 Yet the Conservative energy minister at DECC, Charles Hendry, told me that:

*"The UK has an established and robust regulatory framework that ensures the nuclear industry effectively manages the risks associated with the operation of civil nuclear installations and facilities. As a result of this approach the probability of a beyond-design basis accident is considered to be exceedingly small, the possible costs for which it would not be meaningful to estimate in advance."*<sup>12</sup>

3.7 He added:

*"We are currently working on amendments to the 1965 Nuclear Installations Act to implement the changes to the Paris and Brussels conventions on limitation of liability, agreed in 2004. These changes set a minimum operator liability of €700 million but there is discretion to set a higher limit or have it uncapped. In the circumstances we are reviewing the limitation of operators' liability. ...we intend to consult on our proposed changes to the 1965 Act, including limitation of liability, later this year."*

3.8 Chris Huhne, when asked in Parliament whether he would raise the limit on the exposure of nuclear operators to catastrophes to an equally demanding level as the \$20 billion plus BP are paying for the Gulf of Mexico oil platform disaster, replied:

*“one of the things that we are looking at in the context of making sure that there is no public subsidy for nuclear is the contingent liability regime and ensuring that there are no holes in it.”<sup>13</sup>*

3.9 To extend such a huge potential commitment by agreeing to build eight new nuclear power stations only compounds the risks with the economy that already exist because of our existing reactors.

3.10 If such estimates are in the realm of just a possibility, there can be no getting around the cost of dealing with the nuclear waste that further power stations will generate. Assuming that 8 new nuclear reactor units were to be built in Britain as is possible given the November 2009 National Nuclear Policy statement, the Government’s official nuclear waste watchdog, the Committee on Radioactive Waste Management, (CoRWM ) estimated in 2006 that the total volume of waste in a repository would increase by about 8%, but simultaneously the total radioactivity in the repository would increase by 300%. The price of waste disposal for a new build programme has been estimated, by a pro-nuclear industry consultant, at around £8.2 billion.<sup>14</sup>

3.11 While ministers claim that under their plans companies operating new reactors will have to agree upfront to a ‘fixed unit price’ for their radioactive waste – a plan they claim will avoid subsidies - this is seriously misleading.

3.12 In his response to the Government’s *Consultation on Funded Decommissioning Programme Guidance for New Nuclear Power Stations*, energy economist Professor Gordon MacKerron, Director of the Sussex Energy Group at the University of Sussex and formerly Chair of CoRWM (Committee on Radioactive Waste Management) explained:

*“The motive is clear: there is very large uncertainty about the costs of waste disposal and private investors will find investment in new nuclear power more attractive if they have upfront certainty about the price they will need to pay for waste disposal. This is not quite intervention in the ‘market’, because there is no conventional market in radioactive waste disposal, given Government’s monopoly supply position: but the proposal would effectively be a subsidy. This is because fixed unit prices are intended to make the expected cost (risk-adjusted) of nuclear investment lower than if private firms had to pay for the full costs of waste disposal directly.”*

3.13 It could not be clearer.

3.14 While decommissioning of redundant nuclear power plants will eventually have to be undertaken, early decommissioning, comprising full site clearance to a brownfield land site, is not necessary for safety purposes. It is only needed if the land within the security fence on the site is needed to build new nuclear plants. Otherwise, the defunct reactors can be managed in a passively safe mode, at a much lower cost. In this way, some of the very high capital expenditure needed to support the nuclear decommissioning programme can be delayed.

3.15 In this way, much of the £76 billion nuclear decommissioning and waste management programme being undertaken by the giant nuclear quango, the Nuclear Decommissioning Authority (NDA) could be deferred to a future date when the public finances are more robust, without any compromise to human health or environmental safety.<sup>15</sup>

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<sup>1</sup> Although the nuclear cuts are vital, this in no way signifies my support for the general cuts programme. Indeed I have argued in *Cuts: the Callous Con Trick*, June 2010 (<http://www.financeforthefuture.com/TaxBriefing.pdf>) that the deficit can be dealt with predominantly by fairer taxes. Secondly it is not just nuclear energy that needs its subsidies removed - the same also holds for all fossil fuels.

<sup>2</sup> *A code explodes* James Blitz, Joseph Menn and Daniel Dombey, *Financial Times*, 2/3 October 2010, <http://www.ft.com/cms/s/0/fcce9b76-cd8c-11df-9c82-00144feab49a.html>.

<sup>3</sup> Hansard, 2<sup>nd</sup> June 2010, Column 17W.

<sup>4</sup> *A World Free of Nuclear Weapons*, *Wall Street Journal*, 4 January 2007, <http://www.hoover.org/publications/hoover-digest/article/6109>.

<sup>5</sup> See:

[http://www.conservatives.com/News/Speeches/2010/10/David\\_Cameron\\_Together\\_in\\_the\\_National\\_Interest.aspx](http://www.conservatives.com/News/Speeches/2010/10/David_Cameron_Together_in_the_National_Interest.aspx); [http://www.conservatives.com/News/Speeches/2010/10/David\\_Cameron\\_Together\\_in\\_the\\_National\\_Interest.aspx](http://www.conservatives.com/News/Speeches/2010/10/David_Cameron_Together_in_the_National_Interest.aspx); [http://www.conservatives.com/News/Speeches/2010/10/William\\_Hague\\_Sovereignty\\_clause\\_will\\_enshrine\\_key\\_principle.aspx](http://www.conservatives.com/News/Speeches/2010/10/William_Hague_Sovereignty_clause_will_enshrine_key_principle.aspx).

<sup>6</sup> See: <http://www.tribunemagazine.co.uk/2010/09/cnd-backs-mps%E2%80%99-stance-on-trident-renewal/>.

<sup>7</sup> See: [http://www.greenpeace.org.uk/files/pdfs/peace/ITFL\\_trident\\_report.pdf](http://www.greenpeace.org.uk/files/pdfs/peace/ITFL_trident_report.pdf).

<sup>8</sup> See:

[www.publications.parliament.uk/pa/cm200809/cmhansrd/cm090909/wmstext/90909m0001.htm#0909094000014](http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm090909/wmstext/90909m0001.htm#0909094000014).

<sup>9</sup> Decc, Statement on Energy Policy by Chris Huhne (Written Ministerial Statement) 18 October 2010,

[http://www.decc.gov.uk/en/content/cms/news/en\\_statement/en\\_statement.aspx](http://www.decc.gov.uk/en/content/cms/news/en_statement/en_statement.aspx).

<sup>10</sup> [http://www.mnq.org.uk/gh/private/nuclear\\_subsidies1.pdf](http://www.mnq.org.uk/gh/private/nuclear_subsidies1.pdf).

<sup>11</sup> <http://www.iaea.org/Publications/Booklets/Chernobyl/chernobyl.pdf>.

<sup>12</sup> Hansard 14 July: Column 795-6W.

<sup>13</sup> Hansard, 27 July: Column 874.

<sup>14</sup> Ian Jackson, *Nukenomics: the commercialisation of Britain's nuclear industry*, Sidcup: Nuclear Engineering International Special Publications, 2008.

<sup>15</sup> Based on <http://www.parliament.uk/briefingpapers/commons/lib/research/briefings/snsg-03631.pdf>.