



Together Against Sizewell C

TASC Response to BEIS EN6 NPS 2026-2035 for Nuclear Power above 1GW

9-3-2018

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Preamble.

- TASC and others have demonstrated that there is no need for new nuclear.
- All objectives, ie. security of supply, cost and low CO2 can be met without new nuclear. TASC do not agree that nuclear is low carbon throughout its lifetime. TASC Documents proving this lack of need were sent to the Secretary of State in May 2017. Neil Crumpton and Andy Blowers paper of June 2017 and the BEIS/NGO policy forum paper 17th July 2017.
- TASC remit is to oppose the construction of Sizewell C, however we have found it essential to address the whole policy because of many questions and unsubstantiated claims. Nuclear development, already, in our opinion, fails 19 out of the 20 criteria for environmental protection themes detailed in Scoping opinion page 22, making it completely unsustainable and totally unjustified.
- TASC submit EN6 should be revised in conjunction with assessment of need. This should occur with a revision of all other policy statements, EN1,2,3,4 and 5. We believe an assessment of carbon emissions for each technology for all aspects of construction, operation, decommissioning and waste management, should be made by an authoritative expert. This may also be a requirement of Directive EU2014/52.
- Special attention must be made to the importance and consideration of EN5 Grid connection, concurrent with both EN6 and any other large scale generation requiring new grid connections and/or use of interconnectors. We were interested to learn that the proposed Hinkley Point C grid connection has been declared unsustainable by National Grid. We also note that offshore wind may require DC current connections to the grid which may best be served by marine cable.
- The minister is required to ensure that policy is appropriate. (**EN1 ref 1.6.1**). As EN1 is the overarching policy to which all other policies refer it is essential that EN1 is revised. So that other policies are in accord with EN1, including use of hydrogen, biogas and digesters, smart technology, electric vehicles and use of smart connections, improved efficiency of other technologies especially wind, solar and tidal power. For example at EN1 2.2.20 it is claimed energy storage is not possible. This is now disproved. The use of electric vehicle batteries to back up local grids is also evolving and urgently needs an agreed specification.

- TASC recognise the need for a mix for electricity provision. It appears perverse not to progress technology for carbon capture, particularly for coal and gas. Carbon capture techniques are also beneficial for other manufacturing processes this is an evolving technology and many papers are written on the benefits of capturing CO₂.
- The special nature of nuclear requires full and unequivocally to conform with EU Directives particularly all of EU2014/87 EURATOM BSSD (which takes account of Fukushima) and EU2014/52 Environmental Impact Assessment. This should include all sub directives. Ionising regulations and other safety standards. Health records and the potential impact of multiple sites. The Justification under the Ionising Regulation should be carried out on a site by site basis.
- We do not agree with the statement that we have an effective and robust regulatory framework. We consider we need one regulator to fully conform to EU directive 2014/87 and they should not be bound by the existing "Regulators code". Any Regulator should be open to scrutiny, peer review, independent qualified experts and allow full public consultation. We consider it is not unreasonable to call for cross referencing of EU directives in the revised NPS so as to ensure that all directive requirements are fully considered. The importance of this is because EU Directive 2014/87 which was the result of Fukushima, calls for the need for improved European co-operation and standards and resulted in a major action plan for the existing EDF fleet. The Japanese earthquake response programme is available at:- https://www.edfenergy.com/sites/default/files/japanese_earthquake_response_programmes_final_report_to_the_onr.pdf It is not clear how or if the strengthened safety and siting criteria were transposed into the current EN6. The Emergency Response Centre constructed by EDF for Sizewell B in Leiston Suffolk, is intended to be available 24/7 to supply immediate safety response. It is unclear however if this is a site licence condition. The need for an Emergency response centre should be considered for each site. It is generally believed that Dungeness was removed from the list of original sites because of high flood risk allied to environmental impact. EU Directive 2014/52 has been a major revision to the Environmental Impacts Directive, the first revision in 25 years. We will attempt to show in our response to the BEIS criteria where we would expect the EU Directives to be fully considered.
- TASC do not agree with the statement in the existing EN6 at 2.11.1 "that effective arrangements will exist for the management and disposal of the wastes produced by new nuclear power stations" The use of high burn up fuel, necessary to ensure nuclear power is "cost competitive", is believed to cause significant problems. The issues associated with use of high burn up fuel are outlined in the following paper by the late Hugh Richards:- <http://www.no2nuclearpower.org.uk/reports/TooHottoHandle.pdf> At this stage we also believe there are sufficient concerns with legacy spent fuel (high level waste), in France and Sweden to question whether "disposal" is an option. Government were clearly warned about legacy waste problems in the Flowers report 1976 Conclusion 504 <http://davidsmythe.org/nuclear/flowers%20commission%201976.pdf> and referred to in volume 3 38.31 of the Layfield inquiry into Sizewell B held 1983-85. We note that the UK regulators are unable to be certain how

spent fuel from new nuclear could be safely disposed of or stored. See following link.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/301502/geho0510bsjt-e-e.pdf The reference in this link for the UK EPR, is Flamanville 3 which is delayed from going into generation and it may be that the characteristics of wet and dry storage of new nuclear spent fuel cannot be verified for some time. **We believe that it is morally and ethically wrong to consider commencing nuclear new build when the spent nuclear fuel could have no safe disposal route.** We submit that if costings for new nuclear are based on flawed assumptions about the type of fuel, allied to the use and ultimate storage and disposal of high burn up fuel, this needs a thorough investigation. The so called fixed price deal for waste and decommissioning may certainly prove to be underestimated, with a potential for great loss to the taxpayer.

Additionally.

- The consultation for revised NPS must be in conjunction with all regulators, including the ONR, EA, DEFRA and PHE in a fully open and transparent manner as decreed by EU Law. Those regulators should be sufficiently resourced.
- Claims made in support of nuclear need to be readdressed in the light of new evidence including “low carbon” and “60 year lifetime”. These claims are so important that we consider there should be an independent inquiry into both claims as they are being used to justify a policy which has dis-benefits many of which outweigh any public good. Nuclear plants suffer from internal stress corrosion caused by high pressures, temperature and chemical attack.
- The sites which exist in the present EN6 should be re- considered beyond 2025? Some were only included because of the urgent need before 2025? This should therefore exclude Bradwell, Hartlepool, Oldbury and Sizewell for flood risk alone. Other environmentally damaging sites were justified because of the need before 2025.

EU Directive 2014/87

[http://www.onr.org.uk/documents/2017/council-directive-2014-87-
euratom.pdf](http://www.onr.org.uk/documents/2017/council-directive-2014-87-euratom.pdf)

Helpful explanation of EU Directive 2014/52

[https://www.royalhaskoningdhv.com/en-gb/blog/industrial/new-eia-
regulations-what-has-really-changed-q/7663](https://www.royalhaskoningdhv.com/en-gb/blog/industrial/new-eia-regulations-what-has-really-changed-q/7663)

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