



Greenpeace Submission to DECC consultation on application by Nuclear Industry Association for regulatory justification of Hitachi Advanced Boiling Water Reactor

Greenpeace believes that the ABWR should be treated as a new class or type of practice as each reactor will deliver different wastes, accident risks and potential discharge detriment.

However, we believe that the new ABWR cannot be justified, in part because of new information since the last round of Justification decisions in 2009. We would contend on four areas:

1. Risks of accident and liability. It remains true that the liability regime for accidents from nuclear power stations caps the liability of the operator and builder. This represents a large implicit subsidy predominantly explained on the basis that nuclear power stations would not be built without this liability coverage. Although the liability ceiling has increased in UK, the Fukushima incident in Japan illustrates that
 - a. Even in large, technologically advanced country, risks of serious accident exists
 - b. the liability coverage, well above the cap of €1.2billion, provided by Government/taxpayer may be called upon
 - c. That those liabilities and lost economic and health wellbeing can be sizable even compared with the benefits of a nuclear power programme.
2. Since the last justification decision on the EPR and AP1000, attempts to find a site for geological disposal of high level waste and spent fuel have once again failed and there is now considerable doubt that such a site can be found. There should now be consideration of the impacts of essentially permanent above ground storage of such nuclear wastes, and the detriment that this implies. Under current (failing) plans wastes from new build nuclear would be stored above surface until around 2190. Yet sustained stable political and institutional control beyond 2200 seems hubristic – around 200 years ago Britain was engaged in Napoleonic war with France and it would be a brave person who did not expect great changes between now and then. Bequeathing such challenges to future generations seems unreasonable and unjustifiable.
3. We expect the ABWR to engage in routine discharges. We continue to follow the consensus scientific view that there is 'no safe level' of radiation exposure and that a definite health detriment will exist
4. Justification needs to be done against the background of potential alternative practices and costs. Since the last justification decision the true cost of new nuclear power have been revealed through the strike price for the EPR proposed for Hinkley Point C. This must be an indicative price for nuclear power generally because if future designs were to be significantly cheaper, any Government concerned with value for money for taxpayer/billpayer would surely wait the extra couple of years for a considerably cheaper model to come along and bid for CfD contracts. Given that the £92.5/MWh price, it would seem that at the very least onshore wind and solar power will be cheaper than new nuclear, with a significant chance that shortly after operation, offshore wind will be too, possibly even tidal lagoons. The critical feature of dispatchable power in a system of low carbon intensity under these



circumstances will be that of flexibility – a feature that new nuclear in general and ABWRs do not seem to possess.

Thus the proposed Justification for the health detriment and risk arising from the use of ABWR is unsound. Operating experience shows that there remain risks of severe accident where operators liabilities are capped, the spent fuel and high level wastes have no solution, and the alternatives look more attractive than new ABWRs and other new nuclear stations.