



**Unite Amicus Section response to the Nuclear Consultation -
'Proposed process for justification and strategic Siting Assessment'**

1. Introduction

- 1.1. This response is submitted by Unite Amicus Section. Unite is the UK's largest trade union with 2 million members across the private and public sectors. The union's members work in a range of industries including manufacturing, financial services, print, media, construction, transport, local government, education, the health service and not for profit sectors.**
- 1.2. Unite Amicus Section represents approximately 7,000 people directly employed in the nuclear industry, as well as others in companies in the nuclear industry supply chain, construction and manufacturing, all of whose futures depend on the UK remaining competitive in the global marketplace.

2. **Q 1a: “Are Government plans to structure the proposed Justification process by making a time-limited “call for applications” helpful?”**

- 2.1. A time limited window for applications would focus the minds of industries and individuals on the need to take action if there was some incentive for making such an application within that window. The idea that the time–limited window will then be left open for other applications appears to defeat the purpose of having a time limit in the first place.
- 2.2. There are clear advantages from utilising land adjacent to existing nuclear facilities as highlighted in the Jackson Consulting Discussion paper¹. This land is, however, currently owned either jointly or solely by the Nuclear Decommissioning Authority (NDA) & British Energy and therefore may require the party making the application to either compulsory purchase or require the parties to reach a deal. If Government is to encourage the use of these 14 key locations or any of the other 5 civil nuclear licensed sites to the NDA as suggested, a time limited tender process for these locations would provide an enormous incentive for prospective bidders.
- 2.3. The principle concern of the union is the well being of the employees currently employed by British Energy and the NDA and it would seek assurances from any potential applicant that these jobs will be preserved in the event of a replacement nuclear facilities construction on a neighbouring site or if the ownership of existing plants is purchased by an interested bidder.
- 2.4. Unite Amicus Section believes that without an incentive to invest in nuclear new build, the time limited option would not be helpful. The need to consult on proposals need not be constrained as such consultations could commence on receipt of an application. The occasion a time limited window may be necessary would be in the event of two bids for the same area of land or if the government plans to consult en masse regarding a generic design as suggested in the recent Planning Consultation².

3. **Q1b: “Is the proposed application, assessment and decision-making process clear, appropriate and proportionate? If not, how can it be improved?”**

- 3.1. Unite Amicus Section believes that the process outlined is clear and unambiguous. The outcome of any reform to the planning process consultation, which ended in August, would be critical to answering the question of whether the suggested justification process would be appropriate and proportionate.
- 3.2. If the planning process remains unchanged, the proposed brief consultation period as implied by Figure 1 in the consultation would clearly be insufficient to satisfy the plethora of interested parties who would demand an enquiry to satisfy the need for such a facility which could result in an enquiry similar in length and duration to that of the ill fated Hinckley Point C.
- 3.3. If the planning reforms are carried out as suggested by that White Paper, the Commission would make the final decision on a national policy statement (NPS) for such a key infrastructure project. Any further justification would therefore be restricted. At the Sizewell B enquiry only 30 days worth of evidence out of 340 related to local

¹ Sitting New Nuclear Power Stations: Availability and Options for Government - Ian Jackson and Shehnaz Jackson - Jackson Consulting (UK) Limited - 26th April 2006

² Planning for a Sustainable Future: Consultation

issues. Consequently such a consultation on the justification of an individual site would clearly be limited to purely local issues and as such need only last a relatively short duration.

- 3.4. If a new class or type of reactor is suggested, such a short duration would then not be appropriate as various issues would need to be discussed and re-examined, possibly requiring further examination by the proposed planning commission and wider debate.
 - 3.5. The leading designs on the market are the AECL Advanced CANDU reactor, General Electrics ABWR, Westinghouse AP1000 and the French Areva EPR designs. Some of these designs are more advantageous than others. The CANDU design for example requires no pressure vessel forgings as it employs a heavy water moderator design as opposed to the variations on the pressurised water type employed by the other three.
 - 3.6. Unite Amicus Section has previously set out its desire to see the planning regime significantly improved as the country can ill afford enquiries lasting similar durations to that of Sizewell B. The union has no wish to see the rights of individuals diluted but would want a balance to be struck which is reasonable and proportionate to all parties.
 - 3.7. Similarly the union would wish to see just two designs approved for implementation by all potential bidders. The benefits of this approach have too many advantages to ignore in terms of economies of scale, lower cost decommissioning, and inter-changeability of equipment, etcetera. It is true to say that if a design flaw were discovered then this approach could lead to the closure of the entire fleet, which is why the union would support tried and tested methodology as opposed to a revolutionary new design with all the inherent flaws that could be discovered.
 - 3.8. By opting for two tried and tested designs, public confidence inevitably follows. In the battle for hearts and minds to accept nuclear generation any assistance in this area would be strategically helpful. Such competition would stimulate efficiencies and maximise the utilisation of this resource whilst avoiding a repeat of problems encountered by multiple designs when decommissioning.
4. **Q1c: “Is the indicative list of information, described in Appendix A, appropriate for applicants to be able to make applications?”**
- 4.1. In Appendix A of the consultation, referred to above, it states that “some of this will also be required as part of the generic licensing process”³. If the desire is to avoid undue delay, the planning commission, as proposed by the Planning White Paper, would deal with the majority of the radiological and safety assessments etc on a design by design basis. This would lead to only a list of site specific requirements in this area being listed as may be required by the local environment. A justification document clearly therefore needs only to list these variations and the appropriate measures and list the expected benefits/detrimental aspects to the locality.
 - 4.2. The approach along the lines of the above would have the advantage of providing interested parties with an off the shelf design as opposed to a fully tailored project. This would cut down on cost, provide greater economies of scale, (especially in the area of decommissioning), and enable an area of standardisation.
 - 4.3. The disadvantage would be to stifle innovation as new improved designs and technology come on stream, unless the alteration could be standardised across the

³ Page 13 pt 3

new build fleet. Any variation of a standardised design would require fresh debate and potentially a new NPS, increasing costs significantly.

- 4.4. Unite Amicus Section believes that although new developments may well make some improvement, the size of such improvement would have to be significant to warrant such investment in time and money. This in turn removes the temptation to tinker with the details to the degree seen in the UK's past experience of nuclear generation.
- 4.5. The NDA reported in 2004 that the stations are all different and some presented different problems to others. Although stage 1 decommissioning had been completed at Hunterston A, Berkeley and Trawsfynydd, the remaining liability had risen substantially to about £1.1bn per station, nearly double the estimate of £600 million in 1996⁴, as a result. Clearly if the decommissioning process did not require a tailored approach to each site, it would be far cheaper to complete.
- 4.6. The justification application content guidelines would therefore require far more detail with every new design proposed and an almost regimented response in this area would not suffice. If the design is standardised, however, the justification need only take into account the local variations in population size, location etc without the need to reinvent the wheel.
5. **Q1d: "The Government is planning, where possible, to consider concurrent applications for Justification (relating to new nuclear power station technologies) through a single Justification assessment process. Is the Government's proposal appropriate?"**
 - 5.1. The Justification process as described requires an in-depth assessment of the likely health detriments and net economic, social or other benefits associated with the design of each station. Whilst this may hasten the process and inevitably reduce the cost, the relevance of such an assessment en masse does have disadvantages.
 - 5.2. If a series of designs are to be adopted the amount of data to be included may well be too much for the average individual to comprehend as they would need to refer to their specific location to see the real picture. This could consequently result in a consultation of considerable size which, whilst daunting to look at, would contain data which would have no bearing on the location of interest to the vast majority of the target audience.
 - 5.3. Unite Amicus Section believes that if a single unified consultation is to be published for concurrent applications, the majority of the document would remain unread and, unless skilfully drafted, would become confusing. The same would be true to a lesser degree if a single design is approved given that the target audience would wish to consider only that which would be occurring on their immediate doorstep.
 - 5.4. Unite Amicus Section therefore believes that even if a host of applications are received for the same design during the initial application window individual consultations on justification would need to be produced as well as a more generic consultation on each design adopted.
6. **Q2a: "Is the proposed approach to the Strategic Siting Assessment (SSA) a logical approach to identifying suitable sites? If not, how could it be improved?"**

⁴ Source the Public Services International Research Unit paper - The UK Nuclear Decommissioning Authority By Steve Thomas December 2004

- 6.1. The definition provided in the consultation of SSA's would suggest that the terms of reference are made in general terms without going into a specific assessment of the location. Such a generalist approach would be heavily dependent on the requirements and relative confidence of the designs adopted, amongst a number of other factors, as shown by past experience in terms of favouring a remote location initially, to move to a more semi-urban location and back again.
- 6.2. Although the identification process does address a number of issues it does not address the key issue of staffing such a facility. There is a current skill shortage in the nuclear industry which is becoming more serious by the day and obtaining the suitably qualified staff from the location may be problematic to say the least.
7. **Q2b: "Does the proposed incorporation of Strategic Environmental Assessment into the Strategic Siting Assessment (SSA) represent a reasonable and robust approach to assessing environmental issues that would be raised by the construction and operation of new nuclear power stations? If not, how could such issues be taken into account?"**
- 7.1. It is vitally important that a SSA should include over-arching environmental and infrastructure issues, incorporating, given the effects of global warming and the predicted changes in sea level, increased mitigation measures.
- 7.2. Current designs of nuclear power stations require huge volumes of water to be utilised, therefore the majority of reactors are sited in coastal areas. NASA satellite measurements of sea level change have shown an average 3 mm increase in sea level per year⁵. Over the life of a new facility and its decommissioning this would equate to less than quarter of a metre rise at the current rate. The height of our oceans is not uniform. It is affected by salinity, thermal absorption and the addition of melting water from the poles and other ice sheets. Added to this it is affected by tides and weather conditions which can cause storm surges. The combined effect can create increases, which, due in part to the increases in storm activity, will require special measures to be taken into account around any new coastal installation.
- 7.3. Such an assessment needs to incorporate various other factors such as:-
- geological stability and suitability
 - the ease of connectivity to the national grid system
 - the connectivity of rail linkages to assist in the transport of materials to and from the facility
 - the availability of suitable housing and facilities for staff and their families
 - the provision of suitable educational facilities
- 7.4. By incorporating a set of environmental criteria at the outset, delays in the assessment of potential new locations should be significantly reduced. Sites with existing nuclear facilities are, in the main, ideally placed to fulfil this demand.
- 7.5. The acceptance of nuclear power is clearly dependent upon education of the public at large to dispel the concerns that have developed from suggestions that nuclear facilities are disasters waiting to happen. This is clearly not the case and the sooner the nuclear industry allows for supervised and escorted visits for the general public the better. The reasons given for not doing so in today's climate of security fears and the

⁵ http://visibleearth.nasa.gov/view_rec.php?id=17572

threat of terrorism only serve to heighten fears over new build. If young people are to be encouraged to become involved in the nuclear industry to fill the gap in trained staff that is looming, an early start is needed with the re-establishment of school visits.

8. Conclusion

- 8.1. Unite Amicus Section strongly supports nuclear new build as part of a mix of generation methodologies. The union believes that the best locations for these new facilities is on an area adjacent to existing facilities currently in place or in the process of decommissioning to enable the maximum utilisation of existing infrastructures.
- 8.2. In locations such as Anglesey, local businesses and indeed the local economy are now reliant on the supply of power from these stations. As highlighted previously in the Amicus response to the Energy Review, Anglesey Aluminium is totally dependent upon the supply provided by the Wyfla Magnox facility on the island which is scheduled to close in 2010. Although it may be feasible to extend the life of this station to 2015 this would depend on the extension of the life of the nuclear reprocessing plant at Sellafield. Wyfla power station and the Aluminium smelting facility on Anglesey are the two leading employers on the island and their closure will lead to mass unemployment in this small community.
- 8.3. Unite Amicus Section would therefore urge government to give priority to all existing sites or to sites where nuclear facilities once stood when assessing any application for new build.

Doug Rooney
National Officer
Unite Amicus Section
Hayes Court
West Common Road
Bromley BR2 7AU

For further information please contact Colin Potter, Research Officer in the Unite the union (Amicus Section) Research Department on 0207 780 4011, colin.potter@unitetheunion.com