The future of the UK nuclear industry

K. Parker

Keith Parker, Chief Executive of the Nuclear Industry Association discusses the future of the UK nuclear industry. He takes a look back at what at the time was considered a sunset industry, and highlights the steps that the UK has taken to put it at the forefront of the nuclear renaissance in Europe.

Keith Parker, director ejecutivo de la Asociación de la Industria Nuclear, habla del futuro de la industria nuclear en el Reino Unido. Echa una mirada hacia atrás, a lo que se pensó en su momento era una industria en ocaso, y destaca los pasos dados por el Reino Unido para colocar el país a la vanguardia del renacimiento nuclear en Europa.

KEITH PARKER
joined the Nuclear Industry Association in December 1995 from the DTI and in March 1997 became Head of Corporate Communications. He was appointed Chief Executive in September 2003.
During the 1980s Keith worked in the Department of Energy on the Sizewell B and Hinkley Point C public inquiries.
In the early 1990s, he was Private Secretary for two years to Tony Baldry MP and David Heathcoat-Amory MP, Parliamentary Under Secretaries of State at the Department of Energy. During this period he was closely involved in policy formulation and decision making in the areas of nuclear power, coal, electricity generation and energy efficiency.

"By 2025, if current policy is unchanged, there will be a dramatic gap on our targets to reduce CO_2 emissions;

...we will become heavily dependent on gas; and at the same time move from being 80/90% self-reliant in gas to 80/90% dependent on foreign imports,

These facts put ***the replacement of nuclear power stations****, a big push on renewables and a step-change on energy efficiency ... back on the agenda with a vengeance."*

That declaration by the Prime Minister, Tony Blair, in a speech to the CBI in May 2006, heralded a rapid and remarkable transformation in the fortunes of the UK's nuclear industry, turning around what was generally regarded as a sunset industry, enduring a slow decline, into one with bright and optimistic prospects that is on course once again to be the cornerstone of the nation's energy needs well into the future. Within two years of that speech the Government had published the Nuclear White Paper confirming the "go-ahead that new nuclear should play a role" in the nation's future energy mix.

Without an expansion of low carbon sources of electricity – renewables and nuclear – the UK stands little chance of meeting its obligations for reducing carbon dioxide emissions to combat the causes of global climate change. By the middle of the 2020s all but one of Britain's nuclear power stations that currently supply around 16% of the nation's electricity, will have closed, reducing the diversity of the UK's energy mix making us more dependent on imported energy, and virtually removing the largest source of low carbon electricity generation.

In order to meet those twin challenges of energy security and climate change the Labour Government took the decision to facilitate investment by private sector energy companies in new nuclear plant by devising and implementing measures to remove the barriers to that investment, and provide investors with confidence that Government support and commitment was behind a new build programme. It was and remains a feature of that policy that new nuclear plant will be delivered by the private sector without any direct public subsidy.

In his time as Secretary of State for Business, John Hutton, (now Chairman of NIA) strongly encouraged a bi-partisan approach on energy policy – especially nuclear, given the long term nature of the investment. The present coalition Government has continued the policies set in train during the previous administration. Such continuity of political commitment is crucial to providing the investor confidence needed for such large and long-term investments to be made.

By removing the barriers to investment, through measures such as streamlined planning and licensing processes that had been the cause of delays and cost overruns on nuclear projects in the past, and by providing the economic incentive through reform of the electricity market and establishing a price for carbon, the Government has enabled companies in the UK to step up and revive a strong, vibrant and sustainable nuclear industry.

Plans to replace Britain's nuclear capacity with new stations are now well advanced, and three private sector consortia - EdF Energy and Centrica, Horizon Nuclear Power Ltd., and NuGeneration, a joint venture between GDF SUEZ and the Spanish utility IBERDROLA, have declared their intention to build up to 16GW of new nuclear capacity (potentially 10 reactors on 5 sites) by 2025 with the first of these new stations in operation by before the end of this decade.

In response to this revival companies in the UK supply chain are themselves gearing up to capitalise on their experience and capability to derive commercial and industrial benefit and advantage from participation in the nuclear sector. The scale of investment in nuclear is going to create huge opportunities for companies with long experience and expertise in construction, in manufacturing, in advanced engineering, in project and programme management, in consultancy and in financial and legal services, The industry and my association are working hard on the development of the skilled workforce and capable nuclear supply chain that can deliver both at home and in overseas countries that are planning and delivering substantial nuclear programmes – in

India, China, the United Arab Emirates, in Eastern Europe and South America.

The national economic and employment benefits from these new build projects – each the equivalent of the 2012 Olympics – will be immense. The proposed new build programme will pour billions of pounds into the UK economy and provide employment to around 30,000 workers during the construction period. Those stations will then operate for 60 years, providing secure, long-term, and high quality jobs for generations to come, as well as contributing substantial local and regional economic benefits.

That is in addition to the large volumes of work already underway and planned in operating and maintaining the existing nuclear fleet, in the decommissioning and remediation of old sites, and in the treatment and management of waste.

2011 was a year of immense change for the global nuclear industry. The events at Fukushima following the appalling natural disaster in Japan in March caused governments and nuclear industries around the world to pause and reflect on their plans for the future development of nuclear energy in their countries.

The view in the UK is that the case for an expansion of low-carbon nuclear energy remains compelling, but clearly the lessons from Fukushima have to be studied, understood and applied to ensure that nuclear remains a safe and acceptable form of electricity generation. This is what has been done in the UK with the publication of reports by the Chief Nuclear Inspector, Dr Mike Weightman, into the causes and lessons to be learned for the UK from the tragic events. His analysis of Fukushima revealed no reason on safety grounds either for curtailing the operation of existing plants, or for not going ahead with building new nuclear stations in the UK. He did however make over 30 recommendations for action by nuclear operators, and called for them to strive for continuous improvement in nuclear safety.

The impact of Fukushima on political and public reactions to nuclear energy at a time when the UK is so advanced on a journey towards new nuclear build this is of the highest importance.

Ipsos MORI conducted independent polling in December 2011 on nuclear energy. The key finding showed when asked "do you support or oppose building new nuclear power stations to replace the existing fleet" some 50% agreed - with 20% against – a positive increase on pre-Fukushima polling, and a drop of 8% opposed to replacement power. Overall net support for new build is now above that of November 2010.

Moreover, a poll of UK MPs in June and July showed that 75% of MPs either agreed or strongly agreed that building new nuclear power stations will be a major benefit to the UK's manufacturing and construction industries. This belief has support across all three of the major political parties.

Most recently, the independent polling company YouGov in January 2012 presented members of the public with a list of current or potential infrastructure investments asking them to select which they thought would be 'best for Britain'. New nuclear power stations came top of the list which included a range of projects such as new offshore wind farms, a new runway at Heathrow, and Crossrail - an overground rail network across London.

We can conclude that in general politicians and the public in the UK recognise that the case for nuclear is compelling, but the industry cannot be complacent or believe that such support can be taken for granted. Nuclear energy is a controversial issue, and requires a high degree of political and public acceptance for its licence to operate. The nuclear industry worldwide has to be prepared to learn and apply the lessons of Fukushima just as we did the lessons of Three Mile Island and Chernobyl. We will need to rise to this new challenge and a culture of complete transparency is going to be the critical foundation.

The UK is currently the only western European country with a substantial national nuclear new build programme, and is therefore at the forefront of the nuclear renaissance in Europe.

The UK nuclear industry is in a strong position to capitalise on its long history of achievement in nuclear power, and its reputation for quality and professionalism. Despite setbacks, the UK is determined to maintain the momentum to ensure our nuclear goals are achieved.