# John Ritch, Director General of the World Nuclear Association (WNA)

As the world slowly begins to emerge from recession, *MNB* editor **Judith Perera** asked WNA director general John Ritch how this has affected the nuclear industry and plans for newbuild.

***JP: How do you see the present global financial difficulties affecting the nuclear renaissance?***

**JR**: The recession has created a cautionary impulse in all of industry, and the nuclear industry is no exception. But this is transitional. Throughout the nuclear industry, there is still a strong underlying confidence that the nuclear renaissance is on and will unfold on a huge scale worldwide.

Leaders in the nuclear industry know that nuclear power is now a competitive option even without penalties on carbon and, looking ahead, that nuclear generation will dominate any energy market that imposes a real price for environmental damage. They know too that key governments in the world, representing vast populations, have explicitly affirmed nuclear power as a central element in their strategies for energy security and environmental responsibility.

The immediate challenge is getting the first newbuilds across the threshold, particularly in trend-setting markets like the US. Nuclear technology has extremely low operating costs but high capital costs, and we simply haven't yet had sufficient experience in constructing new-generation reactors to establish a reliable and confidence-inducing fix on capital costs. Relatedly, the financial industry is just beginning to acquaint itself with the reality that nuclear power will be the dominant energy technology of the future. So, on both sides of the equation, investors and lenders, the key players are still feeling their way. In any such context, there is a considerable temptation to let others take the lead and the risk that goes with it. This is where government policy can be extremely valuable.

The Obama administration has rhetorically affirmed that nuclear power must play a role in America's energy future. But its actual policies are still coloured by environmentalist ideology. With regard to nuclear, it's talking the talk but not yet walking the walk. We will know that this administration is serious about realising the benefits of nuclear energy – in emissions reduction and energy security – when we begin to see it supporting loan guarantees on a scale ten times greater than the little programme now on offer.

From a governmental perspective, loan guarantees are an extremely effective way of promoting national policy, with little real risk and a strong likelihood that the government treasury will actually profit from the fees it charges for the guarantee service. From an industry perspective, loan guarantees help to vault the high fence of a capital investment that is huge in comparison with even a big utility's balance sheet.

Guarantees also build confidence that government is genuinely committed to a nuclear-inclusive national strategy, because it has put its money where its mouth is. Industry and investors have a right to be sceptical of government on the subject of nuclear, and loan guarantees are a sound way to overcome that scepticism. All in all, this is a win-win proposition if there ever was one. But it requires government to get off the fence of declaring its acceptance of nuclear while doing very little to realise the huge benefits the technology offers.

We were told that UK prime minister Tony Blair favoured nuclear but we saw him fritter away the British nuclear industry, as his left-wing cabinet ministers steadily sold it off while he remained obsessed with Iraq. I hope we will not see a replay by an Obama administration that is so consumed with other key issues, like health care, that it fails to take the relatively simple steps available to accelerate nuclear newbuild in America. As a practical matter, no single step by any nation could make a greater contribution to the global challenge of climate change than the Obama administration's commitment to accelerate the nuclear renaissance in America. The reverberations would be global.

***JP: How do you see progress in the UK?***

**JR:** Prime minister **Gordon Brown's** government deserves praise for enunciating a strong, unequivocal commitment to nuclear power, and for stressing the essential role of nuclear power in mitigating potentially catastrophic climate change. Sadly for Britain, so much was done over the past decade to debilitate Britain's domestic nuclear industry that this UK renaissance now depends on the involvement of foreign companies. But sound

 

multinational partnerships can be built, and that is now occurring. What counts in Britain, as elsewhere, is a policy that places nuclear power in the centre of strategy for clean-energy development, and prime minister Brown has done that solidly. In that respect, London is ahead of Washington.

In London too, however, there is inadequate appreciation of how effective loan guarantees can be in stimulating the achievement of government aims, with little risk to the government treasury. The Brown government has stated that it wants the marketplace to carry the load, and that can be done, but with enlightened government help. Loan guarantees, it bears emphasis, are not subsidies. They are financial mechanisms by which the government can charge a reasonable fee and make an actual profit while stimulating the achievement of its own policies.

A decade from now, once we are living in a world characterised by the routine occurrence of hundreds of nuclear new-builds, loan guarantees will be unnecessary. But in today's transitional context, they can provide a tremendous pump-priming stimulus.

***JP: But even in Russia, which has massive government support, the new-build programme is slowing so that domestically they are now planning to build just one plant a year instead of two.***

**JR:** Russia has enormous ambitions for its nuclear industry, both domestically and globally. This setback occurs in the context of national economic difficulty. But eventually the Russians will be back to building two reactors a year, and probably more.

***JP: Bulgaria's Belene nuclear power plant project also seems to be in trouble now.***

**JR:** Bulgaria's new prime minister, **Boinko Borisov**, has a strong political mandate and is quite clear that his government will continue to support Belene construction and find a way to get it done. He appears unequivocally committed to nuclear power in Bulgaria's future.

***JP: How about Lithuania where the Baltic project now seems in some doubt?***

**JR:** The Baltic states quite plainly want nuclear. They are simply struggling with the modalities. It's unclear whether and how they will successfully arrange a joint project. But I have no doubt that nuclear juice will be powering central and eastern Europe at an increasing rate, and that the Baltic states will be a part of the grid. The only question is just how that happens.

***JP: But most nuclear activity is still in Asia, especially in China and India. Will these remain key areas?***

**JR:** China is certainly in the forefront, and the interesting question now is how long it will take the Chinese to surpass America as the world's biggest nuclear generator. For the moment, India lags behind, but the scale of its nuclear power ambition is comparable to China's. Now that India has emerged from nuclear isolation, which I strongly supported, we can expect its programme to accelerate at an impressive rate. Within the next 25-30 years India, like China, will probably surpass the US in nuclear generation.

***JP: Pressure has been growing for increases in the International Atomic Energy Agency's (IAEA's) budget. How important is this?***

**JR:** If the question concerns the agency's role in propelling the nuclear renaissance, I see no direct connection because so little of the agency's budget promotes nuclear power. Most IAEA work goes to safeguards and to the dissemination of the many valuable non-power applications of nuclear technology. There is, however, an indirect connection because a sound safeguards system is part of the global framework that makes nuclear commerce possible. And the agency's role in delivering non-power technologies helps to encourage worldwide participation in that safeguards system.

As a former US ambassador to the IAEA and an admirer of its role in the UN system, I always want to see the agency receive adequate funding. However, I do note that it is in the nature of safeguards – which take much of the agency budget – that they are applied on a "non-discriminatory" basis to all non-nuclear-weapon states. Thus, most of the agency's safeguards work inevitably goes to facilities in countries that are clearly good-faith parties to the NPT. With regard to those very few countries whose good faith is subject to question, I have no doubt that the agency will allocate the resources necessary to inspect to the full measure of its authority.

Now, as regards that portion of the agency's budget that is directly involved with nuclear power, we should see value in the agency's efforts to promote technological advancement generally and to help threshold countries working toward introducing nuclear power. But, in truth, the latter efforts are by their nature limited. The Agency

 

offers a good handbook outlining the steps a threshold country must take. But when a country gets serious about establishing a regulatory authority, it must work with already established national regulatory agencies, many of which are willing to help. And when a country gets serious about building and operating a power reactor, it must do business with well established vendors and internationally-oriented utilities, which are well imbued with today's high nuclear standards.

In short, threshold countries are not going to find their way to nuclear through Vienna. Rather, they must find their regulatory way through the assistance of partner regulatory agencies, and they must find their way technologically by contracting with some of the key international enterprises that are members of the WNA. That is why I try to encourage threshold countries to get involved with the WNA early, so that they have a convenient, cost-effective means of becoming acquainted with the diverse enterprises that comprise the global nuclear industry.

***JP: How do you see the skills shortage and supply chain problems being resolved?***

**JR:** I view these as short-term problems that the market will solve. You can educate people to run a nuclear power plant more quickly than you can build one. And you can educate people to regulate nuclear operations in the same time span. As it becomes increasingly understood throughout the realms of journalism and broad public understanding that the nuclear renaissance is on, the supply side of the marketplace will respond with both human and material resources.

In much of the industrial world and especially in Asia, all of this is understood. In China, India, Japan and Korea, aggressive businessmen are working 24 hours a day to meet tomorrow's very real market. They have seen the future and they know it's nuclear.

***JP: Do you see a bright future for small and medium-size reactors?***

**JR:** Their deployment seems inevitable as the nuclear renaissance unfolds and we move into a world with thousands of reactors. As public acceptance becomes more universal and nuclear construction becomes more normal, there will be a natural impulse to deploy small reactors in niche markets because of their efficiency and reliability.

***JP: Is public acceptance of nuclear becoming more widespread?***

**JR:** Only in Europe and the US is there still serious confusion. In Europe, the last bastions of muddled thinking are Germany and Spain. Meanwhile, even in Italy – the only country ever to shut-down an operating nuclear programme – Berlusconi has faced virtually no opposition in reintroducing nuclear power. This progress is, of course, facilitated by the simple practical reality that Italians have noticed that their electric bills are twice those of their neighbours.

As to the US, I see the Democratic Party as the world's last major bastion of confused equivocation, a statement I make as a lifelong Democrat. Because he is so intelligent, I assume that president Obama will at some stage recognise, and act to assert, that a massive expansion of nuclear energy is essential if we are to reconcile global human and environmental need. For now, he continues to tiptoe around the question. So long as that occurs, it represents a major failure of American leadership. Just saying that nuclear must be part of the mix is rhetoric. We need assertive, visionary support for this technology – with America in the vanguard – if we are to meet the human and environmental needs that are pressing down upon us.

## Biography

John Ritch has been director general of the World Nuclear Association since its creation in 2001. He has also served as president of the **World Nuclear University** since its inauguration in 2003.

From 1993 to 2001, he represented president **Bill Clinton** as US ambassador to the IAEA and other **United Nations** organisations in Vienna. There he focused primarily on strengthening IAEA safeguards under the *Nuclear Non-Proliferation Treaty*, Iraq's nuclear disarmament, and the nuclear crisis with North Korea. Previously, Ambassador Ritch served 22 years as a staff adviser to the US senate foreign relations committee, specialising in East-West relations, **NATO** affairs and nuclear arms control.

Ambassador Ritch is a graduate of **West Point,** and holds a master's degree in politics, philosophy and economics from **Oxford University**, where he studied as a Rhodes scholar.

 