

We need vocal public support for nuclear – this is the industry's most pressing challenge.

I participated in the WNA Annual Symposium in London earlier this month. During the event I had ample opportunity to discuss my last post on developing a better understanding of the beliefs behind the public's view of nuclear power and what we as an industry need to do going forward.

But in the meanwhile, we have had quite a bit of unsettling news. The push towards reducing the use of nuclear energy in the established nuclear countries has been accelerating. Most of all we see that Japan is moving towards a policy of no nuclear post 2030s. During the symposium the common thought was that the 15% option may win the day but when the 0% option seemed to be the one moving forward, most of the industry were somewhat stunned. To date this policy has not been implemented as Japan's business and industrial sector has finally spoken up. But this is far from a win. The reality is that in Japan 70% of the public are opposed to nuclear and would like to see it phased out over time.

Other countries have seen similar outcomes. Belgium has decided to close its Doel 1&2 units in 2015 rather than have their lives extended for 10 more years. In Canada the new government of Quebec has announced it will not refurbish and life extend the Gentilly-2 station and even in France, the most nuclear country in the world, government has announced that Fessenheim will be closed in 2016 and a long term goal of reducing the reliance on nuclear from its current 75% to about 50%.

We have become somewhat battle weary in the industry so we tend to rationalize the bad news and look to the good news – and there is considerable good news. The UK is supporting new nuclear and moving forward, new build is underway in the US, Canada is committed to refurbishing its Darlington station and new build continues to move forward, albeit slowly. The middle east is embracing nuclear with the UAE having its project well underway and Saudi Arabia committed to a new nuclear program. India and Russia are both growing their programs; and of course, China is going to be booming and building, leading the world in new nuclear.

So why am I so concerned with the recent trends in some countries? It is not simply the act of shutting down plants or reducing the share of nuclear – it is the rationale behind these decisions. The fundamental belief driving these policies is “less nuclear is better than more” – or in other words, if we can do without nuclear then we should. Now why would anyone believe that less is better than more – there is only one reason and that is the real underlying belief – that **nuclear power is dangerous**. That’s it. If we didn’t believe that nuclear is dangerous there is no reason to reduce reliance on what is actually a carbon free and environmentally benign energy source. And this is not a belief that we should let stand.

Look at the recent decision in Canada. The newly elected Premier of Quebec Mme Marois has stated “I want this gesture to become a symbol of Quebec’s commitment to the environment and the welfare of future generations”. Or let’s look at the decision in France to close Fessenheim, France’s oldest station in 2016 when it reaches its 40 year life. (This is even though the French regulator has already approved its suitability to operate for another 10 years). These decisions are purely political – with the belief that this is what the public wants. In the case of France, a national debate will be launched to discuss the impending “energy transition”.

The issue was wonderfully set out by Mark Lynas in his presentation at the WNA Symposium. In his talk, he told a story of a Japanese couple on a train somewhere in the north of England, who pointed out of the window and asked him if a power station in the distance was nuclear. When Mark made it clear that no, it was not a nuclear plant but rather a coal station, the couple were clearly relieved. And this led Mark to ask himself if the world had gone mad. How could a power source that kills more people every day than nuclear has done in 50 years of operation be the preferred choice for anyone?

Well, looking at what is happening in Germany, in Belgium, in France and in Japan – the question becomes a valid one. Has the world gone mad? Is turning our backs on the world's safest, cleanest and most efficient energy source the way to the future?

To some extent the answer is yes, the world has gone mad. But I say yes, not for the reasons you would think, but because as the world works to turn away from nuclear for reasons that make no sense in science; as the public believes that nuclear power is inherently dangerous and the issue is whether or not we can safely manage these dangerous machines; and as these decisions have real negative impacts to environments, economies and the health and safety of people in these countries; where are the supporters? Now I don't mean the supporters from the industry, the scientists or the industrialists who all understand the benefits of nuclear; the so called "experts", but are also all seen as biased and prejudiced in their support. I mean those members of the public who should be leading the charge to fight to stop the nonsense. After all, the public are ones to really suffer from a dirtier environment and more expensive electricity.

The industry needs an ever growing group of activists who represent the public, not the industry, to fight for more nuclear. We need those who believe that the world is a better place with nuclear power in it than without it. We do see in

France, industry is speaking out. In Japan industry is working hard to keep government from making a decision that will have profound impact on the economy of Japan. And as I have said in earlier posts, we have some key environmentalists who have seen the benefits of nuclear power and how it can contribute to their cause. Those like Mark Lynas, George Monbiot and Stewart Brand and others. These guys are all working hard and speaking out on the side that is less popular with their peers – thus giving even more credibility to them and their arguments. And there is progress. NEI just reported that public support for nuclear is rising in the US, closing in on pre-Fukushima levels.

In his WNA talk, Mark Lynas notes that rebalancing public perceptions of risk more towards what science can tell us objectively is central to any nuclear renaissance and that unbalanced risk perceptions are behind nuclear's major challenges.

This is true. I agree. We also need to note that the way forward is long and hard because decisions are made based on emotion, not scientific fact. What we need are public protests in Germany demanding that nuclear not be shutdown. We need public protests in Japan supporting nuclear restarts. And to get to this point, most of all we need the public not to be afraid. Fear is a powerful emotion that is very difficult to overcome.

The road is a long one. We need to work with experts in public opinion and make the arguments available to opinion leaders in the communities. For example, we know the benefits of nuclear medicine for our health, yet anecdotally, we also understand that doctors were just as afraid after Fukushima as anyone else. There were cases where they were recommending and then performed abortions for fearful mothers. Yet we also know that these same doctors would not hesitate to prescribe a CT scan or x-ray, even if the benefit is doubtful just to placate a patient who has health worries. And the likelihood

is that the dose from these medical tests would be greater than the exposure from Fukushima.

We also argue that we must educate people when they are young. We must bring nuclear energy into the schools so that students understand it more and fear it less. But we also know that teachers as a group tend towards being anti-nuclear.

Hence the problem. Those that are trusted in society like our doctors and teachers are not necessarily on our side. These are the groups that should be more open to scientific proof. These are two groups that we need to work on to move our arguments forward. This is just an example but I think it shows that the climb is a steep one and the work is hard. But now is the time to move. We must all work together to build public support – and that means combating the key issue – that nuclear is inherently dangerous. We must work to help people understand the reality that nuclear power is less dangerous than most alternatives and that the positives are essential for a prosperous, healthy future for us all.

So coming back to Mark Lynas and his thesis. We need to do much more to use science as the source of information to make arguments and formulate public policy. But is that enough? The real question we all need to ask ourselves is what do we need to do so that the Japanese couple Mark met on the train is no longer afraid?