
Swedish executive sets out vision for nuclear energy in Europe for next two decades

(Extracted from speech to Brussels Energy Round Table on February 12 by Nils Andersson, chairman, Swedish Atomic Forum and director, generation, of Sweden's state-owned Vattenfall AB electricity company)

Thirty-five percent of the European Union's electricity is nuclear-generated.

The use of nuclear energy in Western Europe and other parts of the world is actually, despite all negative reports in the media and in political debates, a real success story.

Day-after-day nuclear power makes a valuable contribution to our economic and environmental well-being, and it enjoys an excellent safety record. That safety record has not been built on complacency – far from it. It has been built on the sound technical design of our reactors and by developing an operational culture devoted to getting things right, day in and day out, without fail.

How do we judge success?

The nuclear industry's opponents argue that nuclear is a failed energy technology, as it is such a long time since anyone started construction of a new nuclear plant in Western Europe. But let us not forget that we are talking about power generation facilities – not mobile phones.

No, the slowdown in nuclear plant construction in Western Europe has been due to three main factors that nuclear opponents tend to overlook.

Firstly, there has been no great need for new generating capacity of *any* kind.

Secondly, where new capacity has been necessary, investment decisions have been influenced by plentiful supplies of apparently cheap gas.

And thirdly, of course, the two reactor accidents outside Western Europe, at Harrisburg and Chernobyl, have influenced energy policy in many EU countries.

The benchmark for nuclear's success should be: 'Is the technology economically viable, safe, reliable and environmentally friendly?' On all four counts, nuclear scores high marks.

It is worth recording that there is a recognition of the true value of nuclear energy within the European Commission's Directorate-General responsible for energy and transport. In DG TREN,

nuclear is considered as a necessary component of the EU energy mix for at least the next 20 years, because of the need to fulfil the Kyoto commitments to curb global warming.

It is also worth noting that nuclear's importance, in terms of security of energy supply and climate change policy, was recognised in a fairly balanced way in the European Commission's Green Paper.

However, I would not agree completely with some of the views expressed in the Green Paper.

For example, it contains a statement that renewed growth in nuclear energy "seems unlikely". To my mind, some growth is possible – perhaps necessary – and cannot be ruled out.

On a more positive note, the authors of the discussion document are to be commended for stating that the EU must keep its leading position in nuclear technology, in order not to lose the necessary expertise and to be able to develop safe and more efficient reactors. I would like to add another reason: to sustain the very high safety standards we have already achieved...

Climate change

Nuclear is an important part of the solution to the climate change problem, and developing nations should have the freedom to choose nuclear as part of a sustainable development strategy. It is a freedom that should not be taken away from them by international agreements that have been tailored to meet the demands of Green Party politicians and environmental pressure groups.

The nuclear waste issue is something that must be clarified in the minds of the general public. If this is not done, people will start believing the classic argument of anti-nuclear groups like 'no-one knows what to do with the waste'.

The truth is that the nuclear industry does know how to manage its nuclear waste in a safe way. The safe management of radioactive waste is a reality and has been for a long time.

The only part of the picture that is still missing involves the realisation of final storage facilities for

spent nuclear fuel and the small amount of high-active waste that remains after spent fuel reprocessing. This material is safely stored on an interim basis, but at some stage (in my own country of Sweden within 10 – 15 years) it will have to be isolated from the biosphere permanently.

We already have the safe technology and the financial resources to build the necessary underground repositories.

But these projects must have political backing in order to materialise.

This political process has advanced very well in Finland, where national and local authorities have already agreed to accept a selected site for a final repository for spent nuclear fuel.

In Sweden the political development of the waste issue is well advanced and major political decisions are expected later this year.

It is in this waste area that the European Commission can play an important role, in highlighting the need for national governments to press ahead with repository projects.

Opinions practical

The Commission's own research shows that 19 out of every 20 EU citizens believe that this is an issue that should be resolved now and should not be left for future generations to deal with. We have all benefited in one way or another from nuclear technology. Therefore, we are all responsible for the waste produced, and this responsibility must be translated into policy decisions and concrete actions ... Opinion polls in Germany and Sweden have shown no sign of widespread public opposition to nuclear. What they clearly show is only very limited support for a phase-out.

In my own country, 80% of Swedes want to continue using the existing 11 reactor units. The surveys show that people actually adopt quite a practical approach to nuclear power, taking the view that there is no point in abandoning an energy source so long as it is safe, economically viable and offers environmental benefits.

It is obvious that the official energy policies of Sweden and Germany are completely out of line with public opinion in those two countries ...

At the moment, we are experiencing the emergence of a growing sense of realism, a feeling that we

have to get back to basics and think about how we meet our electricity needs. National or regional government control over electricity production could not be sustained forever, but it did deliver stability and predictability. These are two things that may be lacking in the future, and nuclear power could be one of several ways to restore them ...

To see a current attempt to bring about a return to stability and predictability, we need to look close to home, in fact, to Finland.

Last November, the Finnish power company TVO applied for a government decision in favour of constructing another nuclear unit, the country's fifth. TVO has spelled out the logic behind its choice of nuclear, and the reasons given, point to a typical scenario that could be replicated in other parts of Europe in the years ahead.

It is in just such a scenario that nuclear becomes an obvious choice for new investment.

The conditions facing TVO are:

- * increasing demand
- * ageing fossil-fired plant
- * a need for new baseload capacity
- * environmental requirements
- * dependency on gas and electricity from Russia.

Emerging realism

Basically, if the economic need becomes strong enough, the next two decades may well see the construction of new nuclear plants in Europe.

This is assuming, of course, that nuclear is not outlawed by specific governments for purely political and ideological purposes. Governments in Germany and Sweden have tried this, but have come up against serious difficulties. Perhaps we may see a new realism emerging in these countries in the next two decades.

In the UK, the two main nuclear players, BNFL and British Energy, have both called for a serious public debate on the possibility of constructing new nuclear plants.

This is this sort of debate that all sections of society and government can learn from. It is the sort of debate that the European Commission is seeking from the publication of its Green Paper.

It is also the sort of debate that we can have right here and now.

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