



Supporters of Nuclear Energy

Newsletter

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THINKING AHEAD

This is a Newsletter with a difference. In part it is concerned with the future of SONE itself rather than the future of nuclear energy or a particular form of it. However, it also describes discussions we have been having with another organisation which supports nuclear energy from an independent standpoint, Weinberg Next Nuclear. We are trying to determine whether some form of collaboration would be mutually advantageous.

In this Newsletter I will try to talk you through some of the issues we face, having decided that this year's annual meeting, to be held on Monday October 23rd, should be largely devoted to consideration of the direction SONE should take now that the nuclear renaissance seems likely to happen, albeit belatedly.

THREE OPTIONS FOR THE FUTURE

We have three options – continue as we are, change our approach, possibly through some form of collaboration or even amalgamation with Weinberg, or shut up shop. This final possibility assumes that SONE's independent support for civil nuclear energy is no longer needed and that our decades-long battle has been won. Personally I do not believe that this is the case but others will disagree with me.

The suggestion that we should talk came from Weinberg and it came at an opportune moment. Several members of the SONE Committee felt that we should become more proactive.

For its part, Weinberg was also considering its future, having decided that it should move away from being a single issue lobbyist advocating the use of “next generation “ nuclear technology (although that will remain an important objective for Weinberg's supporters) to one with a wider remit which is not that dissimilar to SONE's and potentially complementary to it.

The problem for both organisation is that it is one thing to feel that more should be done to support nuclear energy from a totally independent position, with no corporate support, quite another to find the wherewithal to do so. It is possible that some sort of association between SONE and Weinberg might help.

WHY WEINBERG?

Not everyone will be familiar with the name Weinberg or be aware of the objectives of the organisation which bears the name. Weinberg Next Nuclear was co-founded as the Weinberg Foundation in 2011 by Laurence O'Hagan, a physicist by background and the Chairman of Weinberg Next Nuclear, and John Durham, best described as a philanthropic environmentalist.

Their main interest when Weinberg was formed was the promotion of the Molten Salt Reactor and they named the new entity the Alvin Weinberg Foundation as a tribute to the late Dr. Weinberg, a fervent advocate of the molten salt reactor system and an early campaigner opposed to burning fossil fuels which he considered caused climate change. He was also one of the first to warn that a moratorium on the construction of nuclear power stations would inevitably lead to more coal burning stations and huge increases in carbon emissions, which is of course what happened, not least in the UK.

Dr. Weinberg was Director of Oak Ridge National Laboratory in the United States between 1955 and 1973 and the main advocate of Molten Salt Reactor (MSR) development. The Foundation which bears his name advocates advancement of the Liquid Fluoride Thorium Reactor (LFTR) and other MSR technologies.

Work on the MSR technology has been going on since the 1960s and for a time the UK was involved. Then Government funding was withdrawn. The case for its adoption is the belief that it has the potential to provide a generating system which is inherently safe, creates minimal waste and is capable of producing clean electricity for many centuries.

That remains the conviction of its advocates, particularly those in Europe, the United States and China who are now working on it with renewed vigour. However, for the most part they also accept that there is still a lot of work to be done on the technology and that we are probably decades away from any sort of MSR construction programme on a worthwhile scale.

That is important. One of the concerns which SONE committee members have is that making unrealistic promises, not only about the potential of MSR designs but also Small Modular Reactors, nuclear fusion or any other innovation might lead politicians to back off the developed nuclear reactor systems now being built or planned.

SONE's objective is simple: "As an independent body, to secure progress towards ensuring that the UK is firmly committed to having a programme of new nuclear power plants to deliver affordable, reliable and low-carbon electricity to homes and businesses."

Despite setbacks - the latest being Toshiba's financial woes, with the potential to scupper the Moorside project - significant progress has been made towards achieving that goal and it's probably fair to say that most of SONE's committee members "are optimistic that the finishing line is in sight - at least for the next wave of new UK nuclear reactors" as one of those members, Adrian Bull puts it.

Adrian has been one of those most concerned that advocating new and novel nuclear systems should not be allowed to become an excuse for the Government to kick into the long grass what we have under way or planned - the new stations at Hinkley Point, Wylfa and Moorside - or provide ammunition for the anti-nuclear campaigners to press for that to happen.

Bearing that in mind, he believes that SONE and Weinberg now have much in common. "Our focus is near term," he says "and theirs further away, but both groups are supportive of all forms of nuclear power generation now and both share the overall objective to secure as much nuclear generation capacity for the UK as possible.

TOWARDS A VIBRANT NUCLEAR SECTOR

"We both recognise that having a vibrant UK nuclear sector, coupled with research programmes into advanced technologies and novel fuel cycles, would be a massive step forward and would have huge value in terms of attracting talented young people into the sector, boosting the UK's credibility as a top table nuclear nation and promoting international collaboration.

"Accordingly, we have agreed to enter into an information-sharing collaboration with Weinberg with a view to raising awareness of each other's activities, avoiding duplication and supporting one another's work where we can."

There are fundamental differences between the two organisations, however. SONE, incorporated on June 1st 1998, has more than 200 paying members, 92 of them Life Members, who have each paid £125 (much of it long spent) and 112 Annual Members who pay £25 a year as an annual subscription. It also receives generous support from occasional appeals to its members, who appreciate the independent nature of what it tries to achieve.

NEXT JUNE IS DECISION TIME

An appeal last year raised £9,000 and this will enable SONE to continue to operate until June next year. By then, if we continue as we are, we will have to make another appeal for funds to members or change our subscription rates which are, I submit, very low.

The breakdown of SONE's expenditure is in the accounts published annually. In brief, we have no paid officers and no office of our own. Our costs are mainly the normal administrative costs, together with the cost of printing and distributing the monthly Newsletter to members who cannot receive it by e-mail because they do not receive the service or do not wish to do so. We also have to meet the cost of managing the website, which a small team led by Adrian Bull has just brought up to date, cutting costs.

SONE used to receive a contribution of £5,000 a year towards its costs from the Nuclear Industry Association, which represents 260 companies, including some which might consider themselves in competition with nuclear energy, and Weinberg also received support from the NIA. This was withdrawn from both organisations last year, with no explanation. The decision to do so is clearly the prerogative of the NIA but the lack of any notice or explanation of the decision was disappointing but probably not too surprising.

The NIA, originally a nuclear industry trade association, the British Nuclear Forum, (of which I was once Chairman) now "takes an all-energy view and supports the development of a balanced low-carbon energy mix for the UK involving renewables, clean coal, gas and energy efficiency, with stably-priced low carbon nuclear at the centre."

THIS IS WEINBERG

Weinberg, founded in 2011, is a truly independent supporter of nuclear energy, like SONE. It is, however, structured very differently to SONE. It has no members for a start and is a charity, which among other things means that it relies entirely on funding from donations by its supporters. It currently receives core funding through a grant from the Weinberg Foundation.

Laurence O'Hagan is Chairman of Weinberg's Board of Trustees. John Durham, is also a Trustee, as is Baroness Worthington, a Labour life peer with a particular interest in the environment and climate change.

Weinberg has three officers at present, employed on a fairly limited part-time basis, the best known being its Director, Stephen Tindale, who is a former Executive Director of Greenpeace UK. Stephen spent two decades campaigning against nuclear power before deciding that it is a necessary part of the solution to climate change, alongside energy efficiency, renewables and carbon capture and storage.

Weinberg's Policy Officer is Suzanna Hinson, who joined Weinberg two years ago, having previously worked at the Centre of European Reform and for Climate Answers. She has been leading Weinberg's work on what public policies are needed to get advanced nuclear power off the ground.

THE DRIVING FORCES

John Lindberg is Weinberg's Technology Officer. A young man in his early 20s, he has an impressive knowledge of the world-wide nuclear industry and has a First in Politics from Glasgow University, having specialised in the effect which fear politics have had on nuclear power. He has broad parliamentary and technical experience and, in my view, is an excellent communicator.

Before joining Weinberg last year he worked as policy adviser to Sir James McGrigor MSP, the Conservative spokesperson on the environment, Europe and external affairs in the Scottish Parliament and was a research intern with the Conservative Chief Whip and Energy spokesperson in the European parliament.

THE DRIVING FORCES

John recently became a member of SONE and, alongside Professor Wade Allison, a new member of SONE's Executive and a recently appointed Patron of Weinberg, he is the driving force behind the attempt to bring some form of association with SONE into being.

Wade is the author of two well-received books on nuclear energy, "Radiation and Reason: The Impact of Science on a Culture of Fear" and "Nuclear Is For Life: A Cultural Revolution" as many of you will know. He is a leading authority on medical physics, especially the effect of radiation on life.

His work has attracted considerable attention around the world, especially following the accident at Fukushima Daiichi in 2011. Since then Professor Allison has been to Japan several times to lecture and to visit teachers, community leaders, doctors and evacuees in the region affected by the accident, a tsunami rather than nuclear disaster.

As Wade said when his appointment as a Patron of Weinberg was announced: "Fukushima showed that radiation is no threat to life - the need for a carbon-free economy should be satisfied by nuclear power. We need a radical change to the way we approach nuclear power, not only in regard to technology, but to the broader cultural aspects. Nothing short of a paradigm shift will be needed. Weinberg Next Nuclear can play a key role as catalyst for change."

Stephen Tindale was clearly delighted that Professor Allison had agreed to become a Patron of Weinberg. "Public opposition to nuclear energy on the basis of exaggerated and unscientific fear of radioactivity is a significant barrier to nuclear progress," he said.

"The world needs more nuclear energy and addressing the fear factor is a major part of nuclear advocacy. So I am delighted to welcome Wade as a

Patron. Wade has immense scientific knowledge and is also extremely well versed in the need for new public communication on nuclear.”

WEINBERG’S CURRENT ACTIVITIES

For a relatively new organisation Weinberg has certainly had its successes. It has been featured in many publications and provided speakers for events around the world. It publishes policy papers, it has a popular blog and uses its newsletter to spread the word about the progress of nuclear globally as, indeed, SONE does.

Among other things, Weinberg supported the creation of the world’s first group of legislators dedicated to advanced nuclear energy, the All-Party Group on Thorium Energy. It is in the process of reconvening the group under the more general title of Advanced Nuclear Power.

John Lindberg and Wade Allison recently began to make contact with MPs with an interest in nuclear energy. They also intend to distribute Wade’s books to MPs and selected members of the House of Lords and these may also become source documents for their researchers. Both John and Wade have contacts with scientists, politicians, environmentalists, journalists and other opinion formers world-wide.

Next month John will be attending a meeting of an organisation called Environmental Progress, which is led by Michael Shellenberger, an American author and environmental policy expert, at that organisation’s invitation. Environmental Progress, which is based in California, is another environmentalist group which came to change its mind about nuclear energy.

As it says: “We used to believe solar and wind could solve climate change and end poverty. After learning the history of environmental progress we changed our minds.

“The greatest threat to the climate today comes from the decline of clean energy as a share of electricity globally. Environmental Progress is working with scientists around the world to defend our largest source of clean energy - nuclear power.”

Environmental Progress describes itself as “an independent organisation building a grassroots movement and thus does not accept funding from any corporate energy interests and does not invest its resources in energy companies.” That seems to me to mirror the position of both Weinberg New Nuclear and SONE.

Professor Allison is a prominent member of the Society for Accurate Radiation Information (SARI) which submitted an international letter to the head of the US Environmental Protection Agency entitled “Establishing

Scientific Bases for Risk-Based Radiation Regulation.” SARI members from the US, New Zealand, Poland, Canada, Germany and Japan as well as the UK signed the letter.

Wade has accepted an invitation make a contribution to the Joint American Nuclear Society/Health Physics Society conference on the biological effects of radiation next year.

I know that some members of SONE believe that it is well nigh impossible to get ingrained regulatory regimes changed but it seems to me that Wade’s campaign, with a growing number of other scientists, to get the Linear No Threshold (LNT) approach to radiation protection scrapped and the As Low As Reasonably Achievable principle at least reviewed is gaining ground. More power to Wade’s elbow say I!

OBJECTIVES OF COLLABORATION

I asked Wade Allison and John Lindberg to set out their ideas on what the objective of a collaboration between SONE and Weinberg should be for a recent meeting of the SONE executive, bearing in mind that they have affiliations with both organisations. Here they are:

- * To promote the advantages of nuclear power to society, young and old, at home and abroad, particularly where the UK can benefit or contribute leadership.
- * To explain in terms accessible to the public why exposure to radiation is almost harmless, as is readily accepted for moderate exposure in a medical context.
- * To advocate reforms of regulatory regimes, internationally and in the UK, that currently appease public fear but penalise nuclear power at great expense and without benefit.
- * To encourage the study of the choices offered by Generation IV reactors and nuclear fusion.

PROACTIVE PLANS, NATIONAL AND INTERNATIONAL

1. Initiatives to speak with civil servants, select committees and politicians in general
2. Initiatives to engage with civil society, including op-ed pieces in leading UK newspapers.
3. To present the case for regulations which are based on more than 50 years of practical experience rather than relying on the most pessimistic interpretation of conflicting scientific opinions.

4. Initiatives in schools to promote an explanation of how radiation, atomic energy and nuclear energy work in nature.
5. To promote informed discussion and reports of these changes in the media.
6. To collaborate with like-minded groups internationally, including SARI, Bright New World (Australia), Analysgruppen (Sweden), Better Environment with Nuclear Energy (BENE, Ireland), American Nuclear Society, Health Physics Society, and Environmental Progress.

That is clearly an ambitious and challenging agenda. Are we up for it? Indeed, are we up to it? It is one thing being interested in doing something and quite another being able to do it. My instinct is this. Let's give it a try and see where we get to.

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SONE Secretary

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