



## Supporters of Nuclear Energy

# Newsletter

No 225

July 2017

---

At the end of his newsletter last February, Harold Bolter wrote that he planned to retire as Secretary of SONE at the 2017 AGM in October. Members of SONE have much to thank him for. He has kept the SONE flag flying for the past three years and has kindly agreed to write the August newsletter as his final contribution. At the June Meeting of the Committee I was invited to draft and circulate a manifesto of ideas for the future of SONE. With the benefit of subsequent comments by Committee Members I am sharing those ideas with the wider membership of SONE in this July newsletter. This will give some time for members to reflect and communicate before the next Committee meeting in September at which, hopefully, it will make a recommendation for approval at the AGM on 23 October.

As Harold records, the aim of SONE

*as an independent body (is) 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*

This is far from realised, even though all political parties now support nuclear power on paper. The reluctance actually to commit long term investment remains, although the environmental incentive for the UK to take a leadership role in the world seems overwhelming. The task of turning public and political opinion into widely accepted action will take further effort over some years yet. That leads to three conclusions, I suggest:

- SONE should continue its mission;
- SONE should engage young people, not only as members but on the Committee too;
- SONE should be more proactive.

We miss the newsletters written by Sir Bernard Ingham, and will now miss those by Harold, but to be true to their legacy we should move on. There are new ways to communicate with those whom we should reach - video and social media. Younger heads can help here too. For example, here is a video by John Lindberg, a 23-year old member of SONE, that he recently recorded while in California:

(<https://www.facebook.com/environmentalprogress/videos/1930425787223777/>)

(John hopes to give a short report at the AGM.) SONE needs to engage with some of the other ways that younger people are supporting the nuclear industry. An illustration comes from the USA: a recent pro-nuclear march in Chicago, organised in part by a vigorous new group, *Mothers For Nuclear!* They marched in California too in a bid to keep the nuclear power stations open in the face of carbon-emitting competition from cheap natural gas. The situation in the UK and Europe is different with supplies of gas available from Russia at Putin's pleasure and from the Middle East threatened by political instability. Security of supply appears large in an encouraging short video by Paul Howarth, CEO of National Nuclear Laboratory *The UK emissions model didn't add up until nuclear was added* (<https://youtu.be/ltfa8sSwZTA>). As he makes clear many in the world can now look to the UK for leadership in nuclear.

So where does SONE go from here? The membership may find another more suitable candidate to take on the job of Secretary, but, to help SONE continue to pursue its objectives, I am prepared to offer myself as a candidate. I am 76, apparently in reasonable health. In 4 or 5 years with the help of members of the Committee and others like John Lindberg, I would hope to recruit new young members and reach out to younger generations as a whole. The finances of SONE are currently stretched, largely I believe by the production of the printed newsletter. I will suggest at the AGM that the newsletter is normally delivered by email, incidentally making active links to video and other internet material particularly easy to follow. Paper copies produced in lower volume would be sent to life members and others on request, in the latter case for an additional £25 per year. To attract younger members I suggest offering a student membership at £5 per year.

But the influences on UK nuclear policy are diverse, and few people are fully up to speed with them all. If I were Secretary I should need to draw on the wealth of experience among members of the Committee and others to achieve a satisfactory balance in the newsletter and elsewhere when speaking for SONE. Some comments from members of the Committee to my draft ideas emphasised the importance of maintaining such a breadth and I accept that. I believe that most aspects are included in my work.<sup>1</sup> The different viewpoints are sketched below in no particular order - these short summaries may draw further comment from SONE members and I look forward to receiving them.

**Employment.** Many young people are interested in nuclear technology as a career. Without their dedication there can be no nuclear revival. It is a long-term investment for them and for the country. The strength of our educational system and relatively positive view of nuclear technology in the population gives the UK an advantage that some other countries lack. However skills and experience take time to develop and are easily lost, as has occurred in the past. If "new nuclear" stagnates and the best jobs are seen to be confined to safety+decommissioning+waste rather than

developing+building real power stations, individual young people may lose faith and the nation will miss this opportunity to secure future competitiveness.

**Costs.** Whether finance comes from investors or government it distributes effort. If spread unevenly it creates distortions. The high price of Hinkley C is thought to be such a burden being passed to our children. However, if future developments ensure longer reactor lives, steady levels of public acceptance, less obsession with safety, waste and decommissioning, programmes of steady construction should lead to more relaxed investor confidence and lower nuclear financing costs with long horizons. SONE should encourage such views of nuclear investment and insurance.

**Nationalism.** In reality the task is international but is most effectively achieved through national encouragement. Japanese/Korean/French/German nuclear interests are not as well received (if at all) by their domestic population but that is not true in the UK. In that case collaboration is beneficial to both sides, as is now under way. Meanwhile, though Russia encourages nuclear phobia through its international media, it develops advanced nuclear power facilities without need for domestic popular comment. India and China are also developing their nuclear power competitiveness without reference to popular concerns. For new nuclear in the UK there is no time to waste if our economy is to be competitive in decades to come.

**Health and Safety.** The details of the link between radiation and cancer, like the link between atmospheric carbon and climate change, is not of direct concern to members of SONE. However the scientific conclusions in both cases set the stage for the incontrovertible safety and unambiguous need for nuclear power, respectively. Pulling the rug from under nuclear/radiation phobia is an educational task that requires the dismantling of current regulations based on the bogus theory of LNT and their replacement by fresh relaxed regulations with education to match. This is explained in my work<sup>1</sup> and also in a recent NEI article (<http://www.neimagazine.com/features/featurea-failed-ontology-linear-no-threshold-model-of-radiogenic-cancer-5874271/>) SONE should be concerned to prevent the younger generations of today from suffering the disastrous effects of nuclear phobia that inflicted the hiatus in nuclear technology of recent decades.

**Nuclear and radiation in medicine.** Medics concentrate on patients' health not politics. This is fortunate when the patient is one of us. However the excessively cautious radiation regulations that reduce productivity and increase costs in the nuclear industry do the same in the NHS.

**Environment.** Exactly what is the effect of carbon emissions (including burning waste and biofuels) on the climate we may never know. But its stability appears to be disturbed. Not upsetting it yet further is a good reason to invest in nuclear. Concern about the environment is a prime motivation for youth and it should be a

reason to educate and encourage nuclear power for every nation too, eg Indonesia.

**New technologies.** There are lots of new technologies: many of them already work and others will be shown to do so. The details will matter, but SONE has accepted an inclusive view to encourage all. By closing the fuel cycle some will be cleaner, by running at a higher temperature some will be more efficient, being modular some will be easier to build with shorter construction times, and final choices will often be made on practical grounds. However safety should not be the highest priority. Less than 50 died from radiation at Chernobyl. If there were another accident like Fukushima, it should not be seen as a global disaster. The only need is to avoid nuclear panic and that is a sociological matter unrelated to radiation or reactor design.

**Location.** Since proper safety and public acceptance should not be difficult to achieve new nuclear plants should be built where they are needed. That is where the population and industry are and where the waste heat can be used to advantage - at Didcot or Drax for example. The historical habit of placing plants out of sight and out of mind increases grid costs. Cooling at inland sites is not such a problem and the choice of locations by the sea could be unfortunate in the event of a large sea level rise.

**The popular view of radiation** and anything “nuclear” dates from the McCarthy era in the 50s, an era of secrecy, distrust and blindness to truth. Safety at that time was regulated to reassure concern about the arms race and nuclear weapon testing. Without evidence, all radiation, however weak, was said to be carcinogenic and any dose should be kept As Low As Reasonably Achievable (ALARA). Recent international calls by scientists, medics and radiobiologists are for new regulations based on scientific evidence. The UK Government, freed from the legal requirements of Euratom post Brexit, should heed these calls and enact such new safety regulations that would be an example to the world.

Wade Allison

[wade.allison@physics.ox.ac.uk](mailto:wade.allison@physics.ox.ac.uk)

1. Books are available to SONE members at £10 each, UK postage included:

*Radiation and Reason: The Impact of Science on a Culture of Fear (2009)* and

*Nuclear is for Life: A Cultural Revolution (2015)* reviewed in the SONE newsletter of Dec 2015.

Videos, lectures, tutorials and other articles posted with free access [www.radiationandreason.com](http://www.radiationandreason.com).

*Published by:* Supporters of Nuclear Energy, c/o 9 Drayton Grove, Timperley,

Altrincham, Cheshire WA15 7PZ Tel: 0161 980 0861

Web site: [www.sone.org.uk](http://www.sone.org.uk) E-mail: [sec@sone.org.uk](mailto:sec@sone.org.uk)