A call for Action: toward a nuclear free world

Introduction:

The AEPF9 Final Declaration calls the ASEM governments to build a nuclear free world. On "Sustainable Energy Production and Use", the 5th "Key Recommendation" states: "Commit to progressing, with urgency, to a nuclear power free world. This will require decommissioning existing nuclear power stations, stopping the development of planned power stations and taking forward alternatives."

During Vientiane AEPF9, an "AEPF No-Nuke Circle" was launched to act on this issue. Workshop participants came from nine Asian and European countries. Representatives of networks from other countries supported this initiative, even if they could not be present at the workshop because of simultaneously held meetings.

The following statement – the « Call for Action » – explains why we engage ourselves in the fight for a nuclear free word.

This statement can be endorsed by organizations, networks and individuals.

For endorsement, please write to: prousset68@gmail.com

At a time when the some of the advanced industrialized countries of North America, Europe and Japan have decided to phase out completely their nuclear energy programmes or reduce their dependence on nuclear energy for electricity production, the main markets for North American, European, Russian and Japanese suppliers of nuclear equipment are in Asia. China and India are the two countries with the most ambitious plans for expanding nuclear power generation. Many other countries are reconsidering or abandoning their plans to start nuclear power production.

To bring about an end to nuclear energy programmes in Asia and Europe more than ever do we need a coordinated campaign among civil society activists and groups not only in the different countries of Asia but also similar alliances with civil society counterparts in Europe where popular disillusionment and opposition to nuclear energy has sometimes been successful in making governments change their nuclear power policies.

The AEPF therefore is an ideal venue for developing such a coordinated campaign. What follows is a statement of basic arguments for opposing nuclear energy in favour of environmentally appropriate use of renewable energy sources.

Our Stand

The promise" of nuclear energy in the 1950s which led to the development of civilian nuclear programmes for electricity generation in numerous countries around the world has been completely belied. Indeed, in the eyes of one expert Amory Lovins, the performance worldwide of civilian nuclear energy programmes has revealed it to be perhaps the single greatest failure of the industrial age! After over 60 years of experience the case against nuclear energy especially given its safety record

is now overwhelming. The main arguments can be summed up under six basic categories – too little, too late, too secretive, too centralised, too expensive, too dangerous.

Too Little

Nuclear energy constitutes an ever declining proportion of world electricity generation whether measured in terms of capacity or output. It now accounts for less than 12% of world output. Of the world's 430 odd existing reactors, even as some old reactors are having their life spans dangerously extended, considerably more reactors will be shut down over the next two decades than will be built. The proportion of electricity generated by nuclear power will go down even further. In 2009 the installed capacity in energy generation with "new" renewable sources (excluding large hydropower) worldwide surpassed nuclear power capacity for the first time. Since then the gap has got increasingly wider. Nuclear power is *not* the energy of the future! The claims made of a nuclear renaissance are false.

Too Late

The most recent and popular argument being made to promote the nuclear power industry is that it is a clean energy source and crucial for addressing the problem of global warming. However, nuclear power is not and cannot be clean given the long lasting and highly dangerous radioactive wastes it generates for which there is no long term safe storage process and for which short term storage processes cannot but carry some level of risk of unforeseeable and possible leakages due to circumstances/events/developments beyond control.

While it is true that nuclear reactors do not directly generate carbon emissions, the whole "nuclear fuel cycle"—from uranium mining to fuel fabrication to building, running and maintaining reactors, and managing and storing/reprocessing their wastes -- produces a substantial amount of carbon dioxide. Therefore the eventual saving or carbon abatement from nuclear power is much less than from most renewable sources although it is more than from fossil fuel burning. However, even such a saving does not make it worthwhile to go in for nuclear power plants since the opportunity costs are so huge and the period of construction (usually 10 to 13 years) is so long that if the same amount of money was spent for establishing renewable energy sources, the amount of carbon emissions saved would not only be much greater but – and this is very important – the savings would take place much more quickly. Some expert studies conclude that for nuclear energy to make a significant dent in carbon emissions we would need to build close to one plant every fortnight for the next ten years!

Too Secretive

Given both its inherent dual-use character, i.e., its military potential in terms of generating fissile materials for bomb-making and the risks of leakages at various points in the construction and running of plants and in waste disposal, all civilian nuclear programmes are unavoidably far more secretive than is the case in other industries. All industries are subject to what organisation theorist Charles Perrow calls "normal accidents". The nuclear industry is no exception. Full transparency about such events would undoubtedly raise great concerns and opposition among the population at large and be highly detrimental to the credibility of all those involved in preserving the nuclear programme – suppliers, operators, governments. The very nature of the industry demands that it must institutionalise deeply undemocratic

mechanisms of non-transparency and non-accountability with respect to the wider public.

Too Centralised

Nuclear power only makes some sense if its role is connected to a highly centralised system of electricity generation and distribution and use which also means significant distribution and transmission losses, i.e accepted inefficiencies. For most developing and developed countries the only sensible approach is to develop a strongly decentralised system of energy production and use alongside existing grid systems since such a decentralised approach is both cheaper and far more compatible with the use of renewable energy sources and local surpluses in electricity generation can be fed into a network of local and regional grids and even into the national grid. Thus, renewable energies are creating many more jobs than nuclear.

Too Expensive

The full costs of nuclear power generation and distribution from the beginning of the fuel cycle to the end of waste disposal and storage are never properly calculated. Indeed, governments from France to Japan to others have always provided open or hidden subsidies of one kind or the other. Among the costs usually excluded in part or full from "levellised costs" or the cost per kilowatt hour produced by nuclear power plants, are the following: a) the cost of decommissioning the plant when its life span is over which is maybe one-third to one-half of the cost of construction itself. b) Not adding the costs, howsoever discounted over a prolonged period, of waste management and storage. c) The 'real' financing cost including interest payments made on borrowed capital and other charges associated with long construction periods. d) Costs are fast rising with new security requirements – and if they were not, it would mean that security is traded off against profits. c) The cost of insurance against accidents (including huge premium costs) if liability is absolute (as it should be) and of creating contingency funds for accidents causing economic, ecological and health damage.

Yet despite the partial or total exclusion of these elements, the costs stated by industry and publicised by the media are everywhere still higher than all other forms of energy production by fossil fuels and with most renewables. Even the most expensive of alternative energy sources today, namely solar energy, is already lower than the levellised costs of nuclear power in many scenarios and steady technical and scientific improvements are making solar energy progressively cheaper over time compared to nuclear power. The opportunity costs of nuclear energy are prohibitively uneconomical. This is the single most important reason why the private sector will not go in for nuclear power without assured subsidies and liability caps guaranteed by governments.

Too Dangerous

There are five kinds of dangers actual or potential.

- 1) The release of ionising radiation and dangerous isotopes bound up with each step of the nuclear fuel cycle, endangering people in various countries from uranium mining to waste storage. These are invisible poisons, which produce cancers and genetic damage and against which there is no defence or cure.
- 2) There is the insoluble problem of waste disposal. Present problems and dangers of waste disposal are partly rationalised by the pro-nuclear lobby as

- the other side of the coin of present benefits and services. But for future generations there are only the problems and dangers and no presumed benefits and services. Nuclear power is poisoning the earth.
- 3) Accidents are normal in all industries. Consequences small or big always follow. But nuclear power is the sole mode of energy generation in the world, which is vulnerable to catastrophic accidents with enormous and unacceptable consequences. The health and environmental effects of nuclear accidents are of such a nature that they must be deemed unacceptable, although the scale of incidence can vary from small to big. Even if as claimed the probability of a major accident is low it is never zero and no one can give a precise measure of how low. But the consequences of a major accident are beyond measure and simply incalculable. Even absolute liability only means that the culprits behind the accidents will lose money while the actual victims of such accidents are innocent others who have to pay with their health and lives!
- 4) Nuclear plants are potential targets for conventional assaults by state or non-state actors, and vulnerable to sabotage with huge consequences.
- 5) The actual or potential military-related dual-use possibilities of civilian programmes means that if the world is serious about wanting to move towards complete disarmament of nuclear weapons then this must require the complete elimination of all civilian nuclear power programmes as well. As long as civilian nuclear power programmes exist, the threat of nuclear weapons proliferation exists.

The countries of Asia and Europe must give up on all or any civilian nuclear power programmes. Where such plants and fuel cycle activities exist, they should be phased out as quickly as possible never to be revived. Nuclear plants can be reconverted wherever possible into other environmentally friendly facilities for productive and employment generating activities.

AEPF initiative on nuclear industry will be articulated with ongoing campaigns for nuclear disarmament and for an overall socially and environmentally appropriate policy on energy.

AEPF "No-Nuke" Circle

For endorsement by organizations, networks and individuals, please write to: prousset68@gmail.com