"Call by scientists against a new nuclear program"

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On February 11, 1975, in the columns of the daily newspaper Le Monde, 400 scientists urged the French population to refuse the installation of nuclear power stations, "until there is a clear awareness of the risks and consequences". Recalling the potentially appalling nature of a nuclear accident, they noted that "the problem of waste is treated lightly", and that "systematically, our leaders minimize risks, hide the possible consequences, and try to reassure us".

The relevance of this call, which could be repeated almost word for word today, has been largely confirmed in recent decades:

- Presented at the time as impossible, several **serious or major accidents** have occurred, leading to massive releases of radioactive materials. They affected reactor cores (Three Mile Island, Chernobyl, Fukushima) as well as radioactive waste repositories or fuel plants (Mayak, Tokaimura, WIPP, Asse).
- Vast geographical areas have thus been rendered toxic to all living beings. Radiation and radioactive contamination continue to claim many victims, including around installations in "normal" operation.
- According to official statistics, the nuclear industry in France has produced more than 2 million tons of **radioactive waste**, including 200,000 tons of waste that remains dangerous over long periods. Furthermore, this account excludes both the tailings waste abandoned abroad, as well as the "materials" intended for hypothetical reuse (spent fuel, depleted uranium, reprocessed uranium ...).
- The dismantling of reactors and clean up of polluted sites, that has barely begun, promises to be excessively long and costly, thus further aggravating the waste toll.

It is clear that after half a century of industrial development, we still have not mastered the dangers of the atom, and have only postponed problems that were foreseen a long time ago.

However, with neither a real democratic debate, nor a serious assessment of past choices and the options available today, our leaders are preparing to relaunch a program of construction of new nuclear power stations. Under the pretext of the climate emergency, but on the basis of truncated, simplistic, even grossly erroneous arguments, lobbyists with significant media influence are working to organize amnesia of nuclear disasters and revise history.

Remember that, to store only a fraction of the most dangerous waste produced to date in France, we are preparing to dig 300 km of tunnels under a site of 29 km², for a cost provisionally estimated at between 25 and 35 billion euros, and this without certainty as to the durability of this repository at the required geological scales, of the order of at least 100,000 years.

Remember that the consequences of major accidents such as Chernobyl and Fukushima cannot be reduced to a small number of "official" deaths. The fact that a serious health and economic assessment of the Chernobyl drama has still not been established should challenge any scientific mind. A wide range of morbidities affect the inhabitants of the contaminated territories. Degraded living conditions, impoverishment and stigmatization will be their lot for centuries.

Two major recent news items should alert us more than ever: accelerating climate change, and the war in Ukraine. The scarcity of fresh water and the reduction in the flow of rivers (essential for cooling reactors) linked to a soon-to-be chronic drought in France, the risks of flooding of coastal areas due to the rise in sea levels, as well as the increasing frequency of extreme climate events, will all make the operation of nuclear facilities very problematic. Betting on new reactors, the first of which would at best be commissioned in 2037, will in no way enable us to drastically reduce our greenhouse gas emissions today, as the climate emergency demands. Moreover, beyond the horrors of war, the vulnerability of the Zaporizhia power plant threatens the whole of Europe. In such a context of geopolitical instability, how are we going to guarantee the eternal peace needed by nuclear power?

In the immediate future, the industrial and financial efforts that this new program would require, would for a long time monopolize the financial and human resources necessary to face the combined challenges of the climate crisis, the collapse of biodiversity, generalized pollution and resource depletion. In fact, the nuclear power system is inseparable from an economic model based on productivism, consumerism and waste, which must be reviewed as a matter of priority.

Today, any criticism of nuclear technology - subject to both industrial and military secrecy - has become extremely difficult within French schools, laboratories and research institutes, all of which are linked to the nuclear establishment. Furthermore, the engineering sciences do not have a monopoly on knowledge or the legitimacy to decide our future. The earth and life sciences, health sciences, social and economic sciences, the humanities, as well as arts and letters, produce surveys, analyses and counter-narratives without which we would know nothing today of the true consequences of atomic energy on societies, living environments and populations, both human and nonhuman.

This is why we, women and men, scientists, doctors, teachers, engineers, academics and researchers launch this call to refuse any new nuclear program. We oppose the decision that has been imposed on us, and that would commit our future for the very long term. We insist on the need to develop, in a democratic and decentralized process, based on local needs, new breakthrough proposals for energy policy based on sobriety, the energy transition, and ecological justice.