

Greenpeace România: Jan Haverkamp, last year we discussed Romania's interest in the SMR technology. In the meantime, things have moved further and Doicești has been designated as the site for the first reactors of this type. Has nuclear energy become a better option from our last talk until now, especially in the context of the permanent and very close threat coming from the nuclear power plant in Zaporizhzhya?

JH: Small steps in what we honestly have to see as unrealistic dreams, like the Romanian SMR adventure, do not change the overall position of nuclear energy. The upheaval in the energy market because of the war in Ukraine has made the voice of those promoting nuclear energy louder. But on the other hand, the increased risks we experience every day in Ukraine, first in the Chernobyl zone, then and still around the Zaporizhzhya nuclear power plant (ZNPP), but also around the other nuclear facilities in Ukraine, are a stark reminder that we still do not control those risks. The authorities overseeing nuclear energy in Europe - the European Commission and the national nuclear regulators, are frantically looking to what kind of lessons we need to learn from the completely unexpected attacks on nuclear power stations and their infrastructure in this horrible war. Even the normally spoken nuclear-friendly IAEA has shown signs of near-panic as a result of sudden loss of off-site power, the risk of losing the ultimate heat sink of ZNPP, the outrageous pressure on the ZNPP staff, and the risks of direct damage to the reactors and radioactive waste facilities. If the war shows anything, it is that, if there is no political stability you cannot operate nuclear power with confidence in safety. And political stability is not something you can guarantee for the decades that nuclear power stations are running, let alone that we have to deal with radioactive waste.

Greenpeace România: Why do you think nuclear power has so much support from the high level authorities in Romania? Paradoxically, the same authorities are still distributing iodine pills to the population because of the nuclear danger coming from Ukraine.

JH: I am slightly surprised about the distribution of iodine tablets. When there will be threat from a severe accident in one of Ukraine's nuclear power stations, there will be ample warning time to provide those at risk (children, pregnant women) with iodine prophylaxis in the case the wind would go towards Romania. It shows clearly that Romanian authorities lack sufficient understanding of nuclear risks. When they start pushing for SMRs now, they make the same mistakes as when pushing for Cernavoda 3, 4 or even 5 in the past - the same mistakes that Ceaușescu made when he wanted to build Cernavoda in the first place. Overhyping benefits and being blind for, and uninformed about the drawbacks only costs money and puts people needlessly at risk. I see authorities too much involved in a PR game, whereas they should focus on urgent climate action - and in that, there is no space for a technology that delivers too little, too late, against too high a price, with very high risks - no place for nuclear energy.

Greenpeace România: What do you think about the location chosen for the SMRs:

Doicesti?

JH: With the huge cooling towers that the old coal plants needed, you can already see that the râul Ialomița is not the optimal source for cooling water for 462 MW of nuclear electricity capacity. The 10 km distance from a population center as Târgoviște also is not very suitable. The reason for this choice is political, not a logical engineering choice. It is clear that the nuclear lobby in Romania is desperate to show some advance rather than intelligently following the developments around SMRs. They want to go too fast into a too uncertain field.

Greenpeace România: Let's discuss the risks again, which ones are they? It is being said that the SMR technology is different and that risks are very, very low. To what extent, in your opinion, is this thing true?

JH: The technology of the proposed NuScale reactors is the very same that is used throughout Europe in reactors since the 1970s. Of course, the design is supposed to have learned from the mistakes we see in the over 200 reactors we have seen operating in the US and Europe, but the basic problems remain. They can melt down when losing all power or cooling possibilities, they are vulnerable to terrorist attacks and acts of war, just like other nuclear power stations currently operating. In certain aspects, the risk is larger, because in order to cut costs, certain safety and security measures that we see in larger power stations will not be implemented. There are proposals to reduce the emergency zone around the reactors.

Of course, the chance that something goes wrong in a way that substantial amounts of radioactive material would be emitted into the environment is small, but we have seen in Fukushima, Chernobyl and Three Miles Island that the impacts can be enormous. For instance, the threat from acts of war to cause common failures of cooling, for instance, are for six reactors of 70 MW comparable to one of 420 MW.

The NuScale reactors have the same drawbacks as existing reactors - risks of accidents, radioactive waste and the risk of nuclear proliferation. What would happen when a Romanian example would motivate the construction of hundreds of small reactors all over the world - too much to keep control over by the IAEA, also in other areas that are not politically stable? Tens of Zaporizhzhya-like threats to have to deal with?

Greenpeace România: Doicesti has been chosen as a location for SMRs without a proper consultation of the local community. What do you think about this situation?

JH: Well, then it is not a final choice. When the obligatory procedures under the Aarhus Convention and the Espoo Convention and the European EIA Directive will have to be carried out, there needs to be a serious comparison with other potential sites, with "all options open" - that means that it should also be possible to locate the plans somewhere else. If Romania does not do that, we'll meet the authorities in appeal procedures and in courts up to the Conventions in Geneva and the plans will be severely delayed. Basically,

choosing a site before having a broad consultation with the public of all potential sites shows the authorities are not serious about this project. If that is the case, ask them why they are wasting money and attention to it. We have a climate problem and energy crisis to solve.

Greenpeace România: What is your message for the people living around the potential SMR site?

JH: Don't give in. You have the right to be heard, and you have the right that decisions are taken on the basis of transparency. Engage experts from among yourself as well as experts from outside to inform you and make clear to the authorities that this is a very bad idea, pushed for all the wrong reasons.

Greenpeace România: Let's discuss the benefits. Do you think that a potential SMR development in Doicești will generate prosperity in the area? Or, simply put, will the people in Doicești have jobs at the nuclear power plant?

JH: Probably there will be some compensation packages for schools and other amenities, to gain acceptance of the local community. The question is whether that will weigh up against the change of environment, where, like in the time of the coal power station, the interests of heavy industry will weigh against the interests of the local population.

Regarding the new jobs, with the exception of some of the cleaners and catering personnel, it is unlikely that the very specialized, highly paid employees for a nuclear power plant will come from Doicești. Those also will not want to live in Doicești, but will rather live in Târgoviște or even in Bucharest. We see that also in Cernavoda. Cernavoda is not the posh wealthy place that can compare to the beach-side in Constanța or the expensive parts of Bucharest.

Greenpeace România: Can Romania afford to continue to invest in nuclear energy? There is a lot of talk about the extension of the Cernavoda nuclear power plant. If yes, who do you think will pay for the new nuclear projects?

JH: Nuclear investments are a complete diversion from today's priorities. We have seen that now in the energy crisis caused by the Russian invasion in Ukraine and the weaponization of energy in this war by Russia - also towards the rest of Europe. Instead of helping citizens to deal with the high prices in the form of active support of energy efficiency measures, cutting down energy wastage in industry, adapting demand to availability and investing in fast exploitable renewable energy sources - these are all things that can be organized in a matter of months and make a real difference for people - politicians talk about nuclear energy. It shows they have larger personal interests in megalomaniac projects than in the wellbeing of citizens or the climate emergency.

Greenpeace România: How can nuclear energy be avoided, which are the alternatives? The authorities declare that nuclear energy is a solution for the climate crisis and even for the new energy crisis.

JH: By claiming that, they clearly show they have other interests in mind. Nuclear energy cannot deliver fast, it cannot deliver against acceptable prices. It never has, it never will. Even in the most optimistic realistic scenarios, NuScale in Romania will not deliver electricity before 2030, more likely not before 2035. With the money wasted on an SMR project, we could already start saving CO₂-emissions within the coming three years by taking measures in industry, agriculture, construction and building renovation, wind-, solar- and geothermal power and optimization of the electricity grid. Steps that really would help the climate and would push down energy bills in the coming years - not in a decade. For the ever continuing saga of Cernavoda 3,4 the same is true. Nuclear is the ultimate diversion from sensible energy policy. We don't need to live with the risk, we don't need to live with the costs.

We need urgent climate action now, we need to adapt to a, let's hope, temporary unstable energy market now. Not in ten years, Green Peace writes.