

UNSENRIC is a French Nuclear Workers Trade Union (research, fuel cycle, and related)

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"Energy in the future 2050": statement of UNSENRIC FO - October 28, 2021

Unsenric FO took notice of the "Futurs Energétiques 2050" (energy in the future 2050) study by RTE (French public operator of the electricity network). RTE studied the energy scenarios to achieve French carbon neutrality by 2050 to limit global warming to + 1.5 ° C as recommended by the IPCC.

This study confirms our 2020 FO statement: "the energy transition and the fight against climate change need nuclear energy as a carbon-free source of energy".

After 2 years of work RTE has established the main axes of French transition:

- energy consumption must be reduced by 50% (of all fossil fuels, electricity, etc.)
- electrification of uses must be increased (+ 50%) in mobility, heating, hydrogen production, etc. to divide by 2 the use of fossil fuels emitting CO2
- it is necessary to maintain nuclear electricity production at the current level (50%, with approximately half and half old and new nuclear) which would minimize the cost of the transition to 60 billion € per year (scenario NO3, against 80 billion € per year in 100% renewable)
- we need to create a "low-carbon hydrogen system" to decarbonize sectors which are difficult to electrify and also to store energy.

The best carbon footprint and the lowest need for mineral resources, in particular copper, aluminum and steel is the "N03" scenario. It is also the lower for artificialization of soils associated with the electrical system.

As we did for several years, Unservic FO warns of the considerable social risks linked to the consequences of global warming. Reducing energy consumption by 50% and consequently the production of wealth should not destroy social gains. It will therefore be necessary to allocate more wealth to wages, otherwise energy transition would be a great antisocial booster.

FO doubts that halving energy consumption can be achieved within 30 years through the combination of greater energy efficiency and "sobriety" (which would be rationing).

Unsenric FO regrets that a scenario with more than 50% nuclear electricity hasn't been studied while this rate reached 75% before a 2015 law imposed its reduction and the unjustified closure of several nuclear power plants.

The "N03" scenario with 50% nuclear electricity is, however, based on the construction of 14 EPRs and a few SMRs. Regarding the EPR projects in continental Europe (Finland and France), this rebirth of the French nuclear construction industry is a challenge that must not be missed. Note that France has been able to build 56 units in 26 years from 1974.

Unserric FO is against the closure of 12 more reactors by 2035, and agrees to allow the reactors to operate for up to 60 years which will be validated by the French Nuclear Safety Authority.

This challenge is available in our sectors:

- scientific and technical research (development of an SMR design),
- nuclear fuel cycle (supply, storage, treatment-recycling).

According to FO, the revival of the Astrid project (French fast breed reactor) by the CEA is urgent: the worldwide development of nuclear power will tighten the uranium market and restore interest in breeder reactors.

In addition, it is necessary to increase the production of Mox, the volume of spent fuel treated, and to approve the moxage of the 1300 MW units. At the same time, the fuel pool storage capacities awaiting treatment must be adapted to needs (densification of Orano La Hague pools, creation of a centralized EDF pool).

Finally, the creation of a deep disposal facility for unusable radioactive waste must be completed.

In conclusion, Unserric FO claims that safety and security for workers and facilities must come first. The operation and development of the nuclear power industry must therefore be carried out with the greatest respect for these principles. Unserric FO claims a Collective Agreement to harmonize and improve nuclear workers' rights.

