

Message from Prof. Xu Mi

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1, The status of fast reactor in the National science and technology development

In the State Program Outline of Mid-Long Term Science and Technology Development (2006-2020) the fast reactor technology is put as front one to be developed as priority.

2, The recent situation of CEFR

After The CEFR realized connecting to the Grid at 40% full power on July 21st last year for 24 hours which is the CEFR project target of inspection acceptance by the Ministry of Science and Technology and the Bureau of Science and Industry, the CEFR has been shut down to wait that prescriptive procedure up to now. The preparation of the documents and engineering drawings completed and of the reckoning of the budgets for inspection acceptance are very time-consuming. The official procedure will be conducted during May to July this year.

It is replanned that the CEFR will realize 100% full power before the end of this year and then some dynamic experiments will be done. After that it will be a fast neutron irradiation facility to conduct irradiation experiments of materials and fuels.

3, Demonstration fast reactors as CEFR following-ups

Thanks to selections to main technical schemes and parameters for CEFR which get much near what of commercial fast reactor technical selections. In other word the CEFR is a small prototype. Therefore it is possible to span from experimental one to that of demonstration.

CFR1000 (1000MWe) or CFR600(600MWe) which conceptual design are under way is mainly based on our own technology. One will be selected to be built after the validation of two conceptual designs. It is envisaged that its first pot of concrete will be in 2017 and commissioning in 2023.

Concerning our technical cooperation on fast reactor in future I suppose that we should continue our cooperation, especially put the emphasis on fast reactor safety and safe operation experiences of fast reactors.

As to the comments on Japanese FR development, following your modest invitation, I write abruptly several words. My notion is that your country has developed economy in high level and it could not reverse; as I understand you lack of energy resources and there is no any new cleaning energy like nuclear to be used in large scale. So nuclear is unique way. Uranium resources is limited, fast reactor should be developed.

I understand the key point is decision-making of the government. It is important to explain to the policy-makers with making great efforts.

On the other hand, the reactors operation without accidents and decreasing incidents are also important. Hoping MONJU operation colleagues take care of running equipments which stopped so long time.