

Summary of the Meeting

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Following the Mito City P&T Information Exchange meeting, related issues seemed to be better understood for the following reasons:

1. Goals were more clear:

- P&T would not replace geological disposal.
- Potential hazard reduction was mainly associated with TRU elements (Pu > Am >> Np, perhaps Cm).
- Reduction of the dose impact to man would come from mobile fission product radionuclides (I-129, Cs-135 > Tc-99).

2. The main motivations for P&T were:

- Ethical reasons for the future generations.
- Public claims concerning geological waste disposal sites (for example, in France).

3. There was, however, a need to better define the following:

- Performance to be coupled with which type of criteria (feasibility, credibility or safety gains) ?
- Which time limits should be considered (1 000, 10 000, 100 000 years or even more) ?
- Which were the best ways for industrial implementation (existing processes and facilities adaptation, new processes and new technologies or a step by step approach) ?
- What would constitute a reasonable level of extra costs ?
- Which were the safeguards aspects to be taken into account ?

Although P&T was seen as a rather long-term research programme, immediate and continuous answers were always needed by decision-makers and politicians. In this regard, it would be necessary: to continue performing technical studies; to continue evaluating the results obtained; to continue with systems and strategic studies; and to continue with the necessary economical evaluations.

Although several disparate approaches were under way, it should be recognised that two large programmes were currently leading P&T efforts: OMEGA in Japan and SPIN in France. Both were in good progress. Partitioning can be performed by both aqueous, and by dry and pyrometallurgical processes, while transmutation could be accomplished by reactor concepts (thermal and fast), fuels and targets, and by accelerators. Concerning partitioning and conditioning two new facilities were in operation: ATALANTE and NUCEF.

Given that P&T programmes constituted long-term activities, there was clearly a role for international organisations in order to disseminate results and ensure proper co-ordination of resources.

Session 6 (Closing Remarks)

Chairman: Mr. G.H. Stevens

It was very positive that so many knowledgeable people from all over the globe participated in the meeting. Warmest thanks were due to the organisers for having hosted an excellent meeting and for their hospitality.

Although some ideas presented were radical in the extreme, over the last few years more filtering of concepts was done and more experiments were performed. Issues concerning benefits for future generations vis-a-vis the risks for facility workers were becoming more prevalent.

Despite the widespread effects of privatisation and the introduction of greater competition into electricity production, resulting in reduction of energy R&D budgets, it was encouraging to see that stable funding was generally ensured for work on the P&T option.

The NEA would go ahead with its P&T systems studies activity and, given the ever increasing number of meetings in this area, would carefully evaluate the future continuation, scope and type of P&T Information Exchange meetings at appropriate intervals.