Session 12 Fuel reprocessing: status and challenges

Speakers from several of the countries that are committed to the closed fuel cycle described their countries' plans for recycling uranium both in the immediate and far future and elaborated on the benefits of this strategy.

A paper from the USA, which has not committed itself to the closed fuel cycle but recognises that there may be a need in future, outlined the changes that would be necessary in the regulatory framework to accommodate recycling. For the time being the NRC will look only at the mature recycle technologies, e.g. PUREX based.

The presentations provoked a discussion on the merits of recycling. Questions as to the economic justification of recycling were raised as well as on the comparative safety aspects. It was noted that for countries committed to the closed cycle the advantages of recycle and FBR technology the justification is clear but for other countries that for various reasons, including the disproportionate costs and scale required, have not committed themselves to the closed fuel cycle, the arguments are not so compelling. For these countries the policy for the immediate future has to be 'wait and see'. It remains to be seen in the future how these countries can share and cooperate in the developments.