Status of ATW Technology and Research Needs from the ADNA-HYTEC Perspective

prepared for

ATW Meeting

February 16-18, 1999
Loews Monet III, Washington, DC

Organized by James C. Bresee,
Office of Civilian Reactor Waste Management
U. S. Department of Energy

presented by the partnership of

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ADNA-HYTEC Goals for Transmutation of Commercial Nuclear Waste

* Elimination of weapons-useful material in commercial nuclear waste

* Recovery of the fission energy from waste actinides

* Elimination of reprocessing

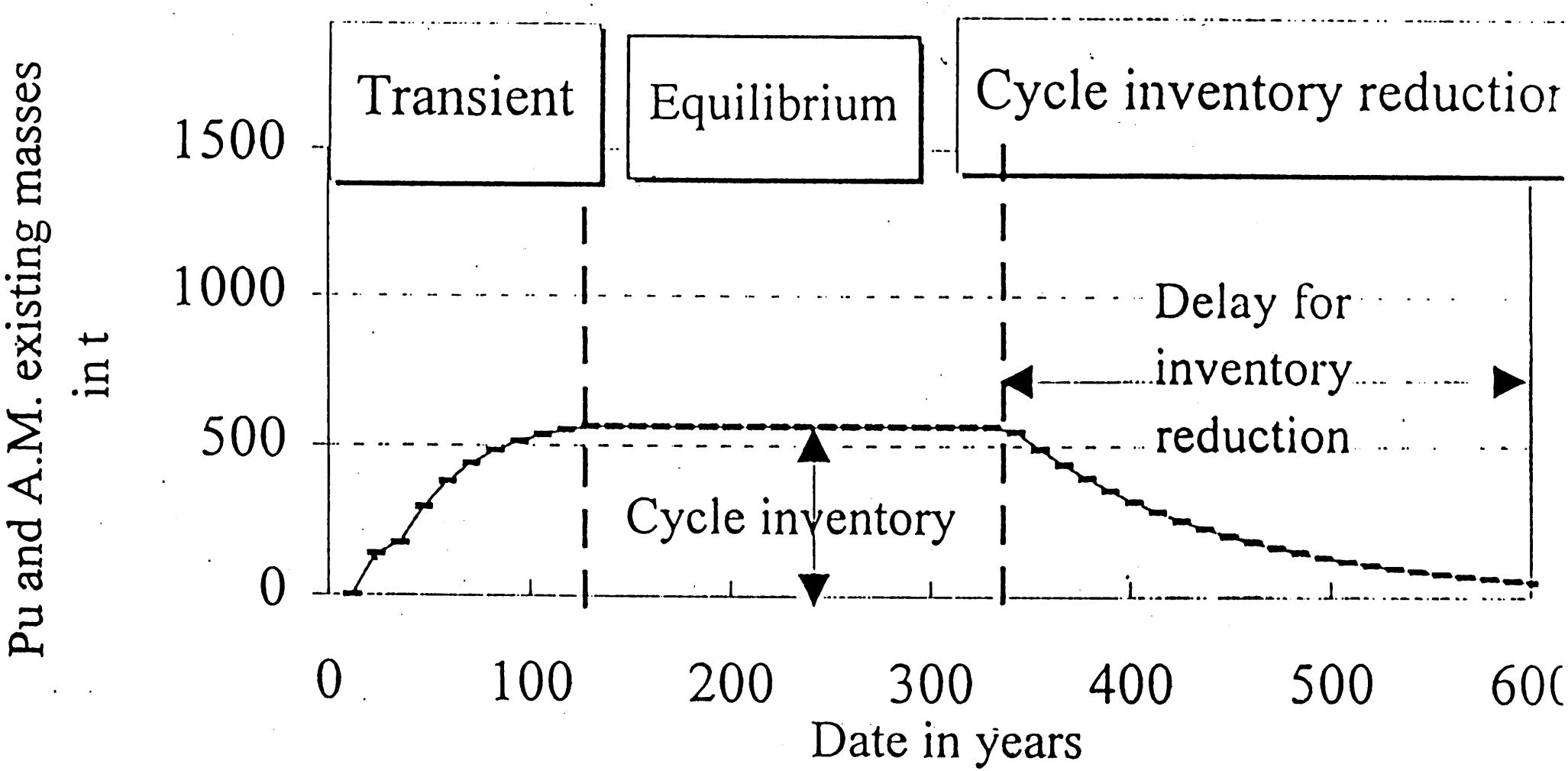
* Transmutation pays its own way
  (Capital and operating costs paid by electric power sales)

* Elimination of lengthy technology development
  (Deployment beginning by about 2012)

* Remnant actinides and f. p. still require geologic storage (Tier-1)

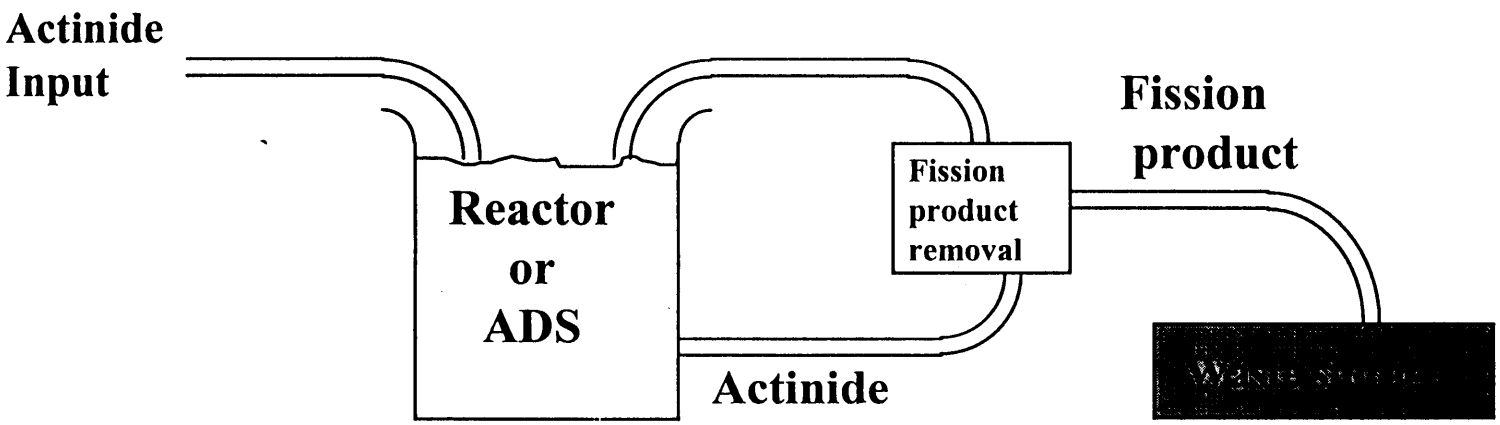
* Further development for complete burn-up if needed (Tier-2)

partly because of the inventories which would be carried inside and outside of the operating facilities of Fig. 1.

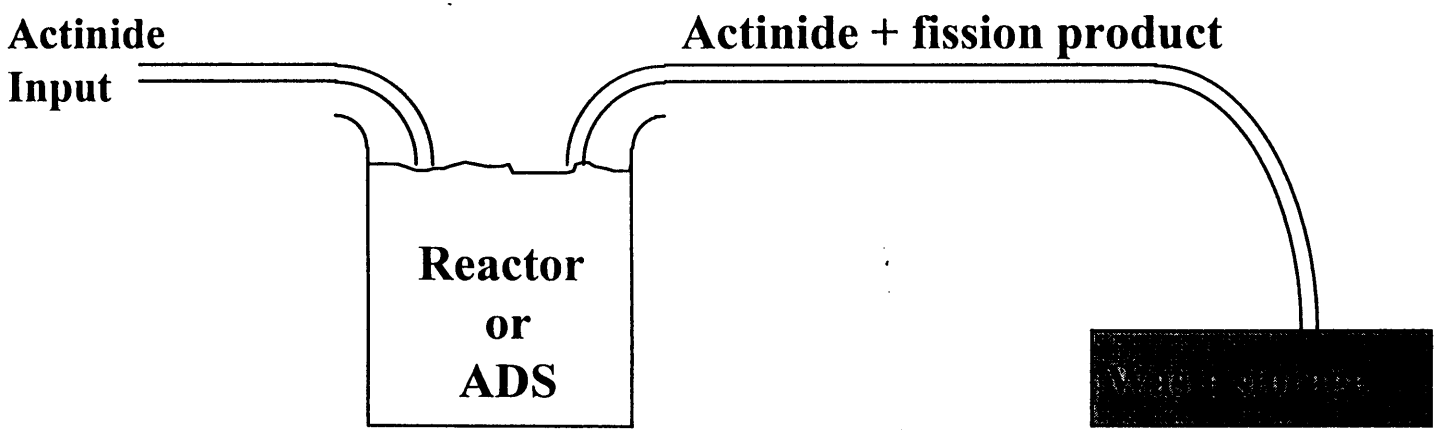


Liquid Fuel Implementation

Early



New Option



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