

Table 2-14. Life-cycle costs for aluminum-clad fuel technologies (1998 millions of dollars).^a

Cost factors	Technology									
	1	1A	2	3	3A	4	5	6	7	8
	Prepare for Direct Co-Disposal	Prepare for Direct Co-Disposal in a Renovated Reactor Building	Repackage and Prepare to Ship ^b	Melt and Dilute	Melt and Dilute in a Renovated Reactor Building	Mechanical Dilution	Vitrification Technologies	Electro-metallurgical Treatment	Conventional Processing ^c	Continued Wet Storage
Wet storage and handling	676	766	NA	676	766	676	676	676	655	1,650
Transfer, storage, and treatment	1,241	919	NA	1,363	1,073	1,566	2,411 ^d	2,625	765	0
Fuel and waste processing	33	37	NA	47	55	46	67	67	610	78
Repository disposal ^e	169	169	NA	56	56	82	198 ^f	23	36	0
Total	2,119	1,891	NA	2,142	1,950	2,370	3,352^g	3,391	2,066^h	1,730

- EC | a. DOE (1998b).
- b. Repackage and Prepare to Ship activities would be accomplished under Prepare for Direct Co-Disposal. The costs are included in those reported for Prepare for Co-Disposal. The material would be shipped to another DOE site. NA = not applicable.
- L14-4 | c. Value is for Conventional Processing of SNF until FY 2010, followed by Melt and Dilute treatment of later fuel receipts. This reduces the size of the facility for the later fuel receipts and lowers the overall life-cycle cost of the Conventional Processing technology by about \$400 million.
- d. Value is for the Dissolve and Vitrify technology. Glass Material Oxidation and Dissolution System would be 2,145 and Plasma Arc Treatment would be 2,143.
- e. Costs for shipping the final waste form from SRS to a repository are included in these cost projections.
- f. Value is for the Dissolve and Vitrify and Glass Material Oxidation and Dissolutions System technologies. Plasma Arc Treatment would be 80.
- L5-16, L14-3 | g. Value is for the Dissolve and Vitrify technology. Glass Material Oxidation and Dissolution System would be 3,087 and Plasma Arc Treatment would be 2,966.
- h. Credits for sale of recovered enriched uranium are not included because of the recently signed agreement between Russia and the U.S. that calls for potential deferment of enriched uranium sales. Including these credits would decrease the cost of the electrometallurgical treatment by about \$150 million and the Conventional Processing by about \$110 million.