Cost Accounts: LSA=3

LANL/UCSD fusion reactor economic evaluation (ver. 11.1) LSA=3 05/26/95

Acc. #	Account Title		M$ (1992)
20.	land & land rights		10.438
21.	structures & site facilities		349.201
22.	reactor plant equipment		1514.219
22. 1. 1.	FW/blanket/reflector	75.245	
22. 1. 2.	shield	305.057	
22. 1. 3.	magnets	410.059	
22. 1. 4.	supplemental-heating/CD systems	54.194	
22. 1. 5.	primary structure & support	152.935	
22. 1. 6.	reactor vacuum systems(unless integral elsewhere)	85.381	
22. 1. 7.	power supply, switching & energy storage	55.322	
22. 1. 8.	impurity control	12.015	
22. 1. 9.	direct energy conversion system	0.000	
22. 1.10.	ecrh breakdown system	4.334	
22. 1.	reactor equipment	1154.542	
22. 2.	main heat transfer & transport systems	204.698	
23.	turbine plant equipment		253.964
24.	electric plant equipment		103.628
25.	miscellaneous plant equipment		53.628
26.	special materials		21.053
90.	direct cost (not including contingency)		2306.130
91.	construction services & equipment		295.185
92.	home office engineering & services		119.919
93.	field office engineering & services		147.592
94.	owner's cost		430.324
96.	project contingency		591.522
97.	interest during construction (IDC)		642.739
99.	total cost		4533.412

				const.	nominal
thermal power (MWth)	= 2292.8	unit direct cost ($/kWe)	[90]=	2306.1	2306.1
gross elec. power (MWe)	= 1054.7	unit overnight cost ($/kWe)	[96]=	3890.7	3890.7
net elec. power (MWe)	= 1000.0	unit total cost ($/kWe)	[99]=	4533.4	6074.9
engineering Q-value, QE	= 19.281	capital return (mill/kWeh)	=	65.82	149.60
plant availability	= 0.7589	O&M(1.70%)(mill/kWeh)	[40-47,51]=	9.97	13.36
6-yr constr.:	const. nominal	W/B/R replace. (mill/kWeh)	[50]=	2.00	2.69
FCR=	0.0965 0.1637	decommissioning (mill/kWeh)	=	0.75	1.13
fIDC=	0.1652 0.3178	D (& 3He) fuel (mill/kWeh)	[02]=	0.03	0.04
fEDC=	0.0000 0.2436	LSA=3 total COE (mill/kWeh)	=	78.57	166.81