LANL/UCSD fusion reactor economic evaluation (ver. 11.1) LSA=2 05/26/95

Acc. #	Account Title	M$ (1992)	
20.	land & land rights	10.438	
21.	structures & site facilities	332.546	
22.	reactor plant equipment	1487.238	
23.	turbine plant equipment	253.964	
24.	electric plant equipment	103.628	
25.	miscellaneous plant equipment	51.898	
26.	special materials	21.053	
90.	direct cost (not including contingency)		2260.764
91.	construction services & equipment		271.292
92. 1.	systems engineering		
92. 2.	management		
92. 3.	quality assurance		
92. 4.	safety & environmental engineering		
92.	home office engineering & services		117.560
93. 1.	construction management		
93. 2.	inspection		
93. 3.	preoperational testing		
93.	field office engineering & services		135.646
94. 1.	project administration		
94. 2.	staff training & plant startup		
94. 3.	inventories & spares		
94.	owner's cost		417.789
95.	process contingency		
96.	project contingency		540.549
97.	interest during construction (IDC)		618.443
98.	escalation during construction (EDC)		
99.	total cost		4362.043

				const.	nominal
thermal power (MWth)	= 2292.8	unit direct cost ($/kWe)	[90]=	2260.8	2260.8
gross elec. power (MWe)	= 1054.7	unit overnight cost ($/kWe)	[96]=	3743.6	3743.6
net elec. power (MWe)	= 1000.0	unit total cost ($/kWe)	[99]=	4362.1	5845.2
engineering Q-value, QE	= 19.281	capital return (mill/kWeh)	=	63.34	143.95
plant availability	= 0.7589	O&M(1.63%)(mill/kWeh)	[40-47,51]=	9.16	12.27
6-yr constr.:	const. nominal	W/B/R replace. (mill/kWeh)	[50]=	1.90	2.55
FCR=	0.0965 0.1637	decommissioning (mill/kWeh)	=	0.50	0.75
fIDC=	0.1652 0.3178	D (& 3He) fuel (mill/kWeh)	[02]=	0.03	0.04
fEDC=	0.0000 0.2436	LSA=2 total COE (mill/kWeh)	=	74.92	159.55