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From Binder 4  
Les's LES pg 29

Krich, Rod M.

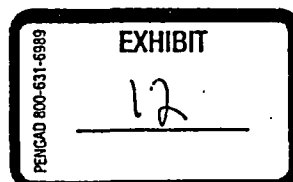
From: Julian Steyn [steyn@energyresources.com]  
Sent: Friday, January 10, 2003 12:35 PM  
To: rod.krich@exeloncorp.com  
Subject: DUF6 re Conf Call Today

NIRS/PC Prefiled Exhibit 162  
Docketed 09/23/05



010703 Table 1   010803 Table 2   010703 Table 3  
DUF6 LLNL Conv ... Conv Cap Op & R... DU308 LLNL Disp...

Rod: Replacement tables --- last two are still drafty. Julian.



LES-01630

TABLE 1		
LLNL-ESTIMATED LIFE-CYCLE COSTS FOR DOE DUF6 TO DU3O8 CONVERSION (a) (MILLION DOLLARS FOR 378,600 MTU OF DUF6 OVER 20 YEARS; DISCOUNTED 1996 DOLLARS)		
Conversion Capital & Operating Activities	AHF Conversion Alternative	HF Neutralization Conversion Alternative
Technology Development	9.84	5.74
Process Equipment	22.36	20.88
Process facilities	46.33	45.53
Balance of Plant	29.20	30.25
Regulatory Compliance	22.70	22.70
Operations & Maintenance	134.76	198.40
Decontamination & Decommissioning	1.76	1.73
<b>Total Discounted Costs:</b>	<b>266.95</b>	<b>325.23</b>
<b>Total Undiscounted Costs:</b>	<b>902.6</b>	<b>1160.1</b>
<b>Undiscounted Unit Costs (\$/kgU):</b>		
TOTAL (1996 Dollars)	2.38	3.05
TOTAL (2002 Dollars per GDP IPD)	2.64	3.39
(a) UCRL-AR-127650, Cost Analysis for the Long Term Management of Depleted Uranium Hexafluoride, May 1997, Table 4.8, page 52.		
AHF: Assumes sale of anhydrous hydrogen fluoride; \$77.32 million credit assumed.		
HF: Assumes sale of calcium fluoride (CAF2) produced from hydrogen fluoride (HF); \$11.02 million credit assumed.		

TABLE 2				
SUMMARY OF LLNL-ESTIMATED CAPITAL, OPERATING, AND REGULATORY UNIT COSTS FOR DOE DUF6 TO DU308 CONVERSION (a) (UNDISCOUNTED DOLLARS PER KILOGRAM OF U as DUF6)				
Cost Breakdown	AHF Alternative		HF Neutralization Alternative	
	1996\$	2002\$	1996\$	2002\$
Capital (b)	0.72	0.80	0.69	0.76
Operating & Maintenance	1.51	1.67	2.22	2.46
Regulatory Compliance	0.14	0.16	0.14	0.16
Total:	2.37	2.63	3.05	3.38
(a) Unit costs based on Table 1 costs.				
(b) Technology development, process equipment, process facilities, balance of plant, and decontamination & decommissioning				
Note: Summation may be affected by rounding.				

TABLE 3			
LLNL-ESTIMATED LIFE-CYCLE COSTS FOR DOE DU3O8 DISPOSAL (MILLION DOLLARS FOR 378,600 MTU OF DUF6 OVER 20 YEARS; UNDISCOUNTED 1996 DOLLARS)			
DU3O8 Disposal Capital & Operating Activities	DU3O8 Disposal Alternatives		
	Engineered Trench	Concrete Vault	Mined Cavity (UG Mine)
<b>Waste Form Preparation (a):</b>			
Technology Development	6.56	6.56	8.20
Balance of Plant	26.43	26.43	26.43
Regulatory Compliance	2.02	2.02	2.02
Operations & Maintenance	33.23	33.23	33.23
Decontamination & Decommissioning	0.60	0.60	0.60
Subtotal	68.84	68.84	70.48
<b>Waste Disposal (b):</b>			
Facility Engineering & Construction	12.22	96.08	409.02
Site Preparation & Restoration	0.89	1.68	19.21
Emplacement & Closure	30.61	39.2	248.88
Regulatory Compliance	40.35	40.35	40.35
Surveillance & Maintenance	2.29	2.86	2.21
Subtotal	86.36	180.17	719.67
<b>Preparation &amp; Disposal Discounted Total Costs:</b>	155.20	249.01	790.15
<b>Preparation &amp; Disposal Undiscounted Total Costs:</b>	499.60	742.50	2431.60
<b>Undiscounted Unit Costs (\$/kgU):</b>			
TOTAL (1996 Dollars)	1.31	1.95	6.40
TOTAL (2002 Dollars per GDP IPD)	1.46	2.17	7.10
(a) UCRL-AR-127650, Cost Analysis for the Long Term Management of Depleted Uranium Hexafluoride, Table 4.12, page 64, May 1997. (b) Ibid., Table 4.12, page 65.			