


A	B	C	D	E	F	G	H	I	
1		Version 0.2.7		https://www.ing-goebel.de/dbhd-1-4-2-international/					
2	Calculation 6x DBHD 1.4.2 nuclear repository International								
3	Last edit: 27. January 2020 / Dipl.-Ing. Volker Goebel CH, DE / Nuclear Repository Planner ww								
4	Capacity : 2.047 HLW Containers Germany / plus 577 HLW Containers from Switzerland								
5	Repository-Storage-Depth : from -1.350 Meters down to -2.100 Meters								
6	Based on : Draft-Planning from 2014 - 2020 actually in Version 1.4.2 with Time Table								
7									
8									
9	Type of invest	Amount	Offer / Quote	Factor	Total	Comment	dwg		
10			or hint from :						
11	Repository Plans	2014-2020 (6 yrs)	Ing. V. Goebel+T.	850'000 €	5'100'000 €	Draft-Plans, B-Plans	yes		
12	Probe-Drillings	12 x	Prof. Dr. M. Reich	8'500'000 €	102'000'000 €	Cores > -2.300 m			
13	6x Land Purchase	6,6 km2	from local owners		66'000'000 €	6 x 110.000 m2	yes		
14	Shaft-Boring-Ma.	2 x SBM	Herrenknecht AG	60'000'000 €	120'000'000 €	2 yrs. delivery time	yes		
15	External streets	40 km	make-over		12'000'000 €	new / enhance			
16	DB Rail Connection	3 x	only last meters		18'000'000 €	3 of 8 locations			
17	E-powerconnection	6 x	local supplier		15'000'000 €	10 kV med. voltage			
18	Water-connection	6 x	incl. water		18'000'000 €	10 bar with DN 200			
19	Internal Logistics		anticipation		30'000'000 €	6 building sites	yes		
20	Drill platform core	6 x	43.000 m3	1'000 €	258'000'000 €	floors and walls	yes		
21	Mat. storage ring	6 x	70.000 m3	900 €	378'000'000 €	floors and walls	yes		
22	Conveyor Belts	3 x			60'000'000 €	diverse types			
23	Heavy load trucks				9'000'000 €	MB Dump trucks			
24	Compensations	20.000 Shares DE	direct local people	30'000 €	600'000'000 €	payment not bribe	yes		
25	Compensations	5.667 Shares CH	direct local people	30'000 €	170'000'000 €	payment not bribe	yes		
26	Planning Offices	Scientific expertise	many disciplines		123'000'000 €	over 12 years			
27	Approval Fees		many agencies		50'000'000 €	to Gov. Agencies			
28	Startfound. SBM	6 x	Thyssen Schachtbau	3'000'000 €	18'000'000 €	temp. Structures			
29	Shaft Drills D=12 m	6 x	Thyssen Schachtbau	31'500'000 €	189'000'000 €	autom. Maschine			
30	Spray-concr.-wall	9,3 m2 x 1.350 m	12.555 m3 x 6	600 €/m3	45'200'000 €	steel-fibre-amored	yes		
31	Shaft completion	3 sets	Siemag Tecberg	30'000'000 €	90'000'000 €	Vent., Transport			
32	Air-Conditioning	2 x	CFT GmbH	21'000'000 €	42'000'000 €	cold air + 8 °C IN	yes		
33	Air-Cooling Power	60 x 4,5 Mio. kWh	local suppliers	800'000 €	48'000'000 €	6 x 10 years			
34	Watercooling tubes	2 Sets DN 100 PN 340	Steelbuilders	6'400'000 €	12'800'000 €	16.000 Elements			
35	Watercooling Sets	2x9x2 ESO 9702AHF-ze	Stulz Hamburg	6'500'000 €	13'000'000 €	151 m3 / h - 5 °C	yes		
36	Watercooling Power	60 x 4,5 Mio. kWh	local suppliers	800'000 €	48'000'000 €	6 x 10 years			
37	Cable-Drum-Houses	6 x	140.000 m3 S.T.	1'000 €	840'000'000 €	Drum-Diam.=14 m			
38	Work-Over Rigs	3 x	Steelbuilders	3'200'000 €	9'600'000 €	with return pulley			
39	Dyneema Ropes	10 x	Gleistein DE	3.900.000	39'000'000 €	D=80 mm 2.120 m	yes		
40	Transition Cone	6 x	concrete constr.	880'000 €	5'300'000 €	12 m. to 18 m.			
41	Hole-opening	6 x	to Diam. = 18 m.	4'800'000 €	28'800'000 €	with chain-saws			
42	Staff 60 years	50 Man&Woman	4 h. shifts down t.		356'250'000 €	Work & Safety			
43	Rocksalt-Salt-Sale	6 x 255.000 m3	rough quality	50 €/m3	-76'500'000 €	Asse/M./Gorleben	K+S		
44	Concr. Mix Plant	2x	Stetter DE	600'000 €	1'200'000 €	2x 110m3/h	yes		
45	Concrete-Pellets	58 Pellets	2.590 m2 x 58 x 6	70 €/m3	36'100'000 €	Quality-Concrete	yes		
46	Sand/fine gravel	58 Layers 1,5 m	382 m3 x 58 x 6	50 €/m3	6'646'800 €	D = max. 3 mm			
47	Magnetit powder	58 Portions	70 m3 x58 x 6	680 €/m3	16'564'800 €	Rio Tinto, Billiton			
48	Closure works	6 x	own Salt grain		60'000'000 €	Salt + M. Pressure			
49	building back	6 x			12'000'000 €	farmland again			
50	Unforseeables	3%			116'251'848 €	not BER airport			
51	Total	January 2020	Version 27		3'991'313'448 €				
52									
53									
54	plus HLW containers, plus rail-transports, plus law-cases					4,0 Mrd. EUR			
55									
56									
57									