

Sheet2

Year n	actual Build cost	discounted Build cost	actual O&M cost	discounted O&M cost	discounted cumulative cost
\$0.00	\$1,020.00	\$1,020.00	\$37.50	\$37.50	\$1,057.50
\$1.00	0	\$0.00	\$37.50	\$35.71	\$1,093.21
\$2.00	0	\$0.00	\$37.50	\$34.01	\$1,127.23
\$3.00	0	\$0.00	\$37.50	\$32.39	\$1,159.62
\$4.00	0	\$0.00	\$37.50	\$30.85	\$1,190.47
\$5.00	0	\$0.00	\$37.50	\$29.38	\$1,219.86
\$6.00	0	\$0.00	\$37.50	\$27.98	\$1,247.84
\$7.00	0	\$0.00	\$37.50	\$26.65	\$1,274.49
\$8.00	0	\$0.00	\$37.50	\$25.38	\$1,299.87
\$9.00	0	\$0.00	\$37.50	\$24.17	\$1,324.04
\$10.00	0	\$0.00	\$37.50	\$23.02	\$1,347.07
\$11.00	0	\$0.00	\$37.50	\$21.93	\$1,368.99
\$12.00	0	\$0.00	\$37.50	\$20.88	\$1,389.87
\$13.00	0	\$0.00	\$37.50	\$19.89	\$1,409.76
\$14.00	0	\$0.00	\$37.50	\$18.94	\$1,428.70
\$15.00	235	\$113.04	\$37.50	\$18.04	\$1,559.78
\$16.00	0	\$0.00	\$37.50	\$17.18	\$1,576.96
\$17.00	0	\$0.00	\$37.50	\$16.36	\$1,593.32
\$18.00	0	\$0.00	\$37.50	\$15.58	\$1,608.90
\$19.00	0	\$0.00	\$37.50	\$14.84	\$1,623.74
\$20.00	0	\$0.00	\$37.50	\$14.13	\$1,637.87
\$21.00	0	\$0.00	\$37.50	\$13.46	\$1,651.33
\$22.00	0	\$0.00	\$37.50	\$12.82	\$1,664.15
\$23.00	0	\$0.00	\$37.50	\$12.21	\$1,676.36
\$24.00	0	\$0.00	\$37.50	\$11.63	\$1,687.99
\$25.00	0	\$0.00	\$37.50	\$11.07	\$1,699.06
\$26.00	0	\$0.00	\$37.50	\$10.55	\$1,709.61
\$27.00	0	\$0.00	\$37.50	\$10.04	\$1,719.65
\$28.00	0	\$0.00	\$37.50	\$9.57	\$1,729.22
\$29.00	0	\$0.00	\$37.50	\$9.11	\$1,738.33
\$30.00	480	\$111.06	\$37.50	\$8.68	\$1,858.07
\$31.00	0	\$0.00	\$37.50	\$8.26	\$1,866.33
\$32.00	0	\$0.00	\$37.50	\$7.87	\$1,874.20
\$33.00	0	\$0.00	\$37.50	\$7.50	\$1,881.70
\$34.00	0	\$0.00	\$37.50	\$7.14	\$1,888.83
\$35.00	0	\$0.00	\$37.50	\$6.80	\$1,895.63
\$36.00	0	\$0.00	\$37.50	\$6.47	\$1,902.11
\$37.00	0	\$0.00	\$37.50	\$6.17	\$1,908.27
\$38.00	0	\$0.00	\$37.50	\$5.87	\$1,914.15
\$39.00	0	\$0.00	\$37.50	\$5.59	\$1,919.74
\$40.00	0	\$0.00	\$37.50	\$5.33	\$1,925.07
\$41.00	0	\$0.00	\$37.50	\$5.07	\$1,930.14
\$42.00	0	\$0.00	\$37.50	\$4.83	\$1,934.97
\$43.00	0	\$0.00	\$37.50	\$4.60	\$1,939.57
\$44.00	0	\$0.00	\$37.50	\$4.38	\$1,943.95
\$45.00	235	\$26.15	\$37.50	\$4.17	\$1,974.28
\$46.00	0	\$0.00	\$37.50	\$3.97	\$1,978.26
\$47.00	0	\$0.00	\$37.50	\$3.79	\$1,982.04
\$48.00	0	\$0.00	\$37.50	\$3.61	\$1,985.65

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\$49.00	0	\$0.00	\$37.50	\$3.43	\$1,989.08
\$50.00	0	\$0.00	\$37.50	\$3.27	\$1,992.35
Decommission = 1%	\$1,970.00	\$171.79			\$2,164.14

All values are in units of \$ /kW

Energy source is Onshore wind

Assumed discount rate is 5% /yr

Levelized cost of Power = \$2,164.14 \$ /kW

Capacity Factor = 37.9%

Levelized Cost of Energy – LCOE = $\$2164.14 \div 166.002$ \$13.04 /MWh

	Actual Build cost	Discounted Build cost	Actual O&M cost	Discounted O&M cost	Cumulative cost	Yearly energy
Year n	\$3,370 /kW					average
	\$700	\$700.00	\$179.44	\$179.44	\$879.44	8.059
1	\$700	\$660.38	\$179.44	\$169.28	\$1,709.10	8.059
2	\$700	\$623.00	\$179.44	\$159.70	\$2,491.80	8.059
3	\$700	\$587.73	\$179.44	\$150.66	\$3,230.19	8.059
4	\$570	\$451.49	\$179.44	\$142.13	\$3,823.82	8.059
5	0	\$0.00	\$179.44	\$134.09	\$3,957.91	8.059
6	0	\$0.00	\$179.44	\$126.50	\$4,084.41	8.059
7	0	\$0.00	\$179.44	\$119.34	\$4,203.74	8.059
8	0	\$0.00	\$179.44	\$112.58	\$4,316.33	8.059
9	0	\$0.00	\$179.44	\$106.21	\$4,422.54	8.059
10	0	\$0.00	\$179.44	\$100.20	\$4,522.74	8.059
11	0	\$0.00	\$179.44	\$94.53	\$4,617.26	8.059
12	0	\$0.00	\$179.44	\$89.18	\$4,706.44	8.059
13	0	\$0.00	\$179.44	\$84.13	\$4,790.57	8.059
14	0	\$0.00	\$179.44	\$79.37	\$4,869.93	8.059
15	0	\$0.00	\$179.44	\$74.87	\$4,944.81	8.059
16	0	\$0.00	\$179.44	\$70.64	\$5,015.44	8.059
17	0	\$0.00	\$179.44	\$66.64	\$5,082.08	8.059
18	0	\$0.00	\$179.44	\$62.87	\$5,144.95	8.059
19	0	\$0.00	\$179.44	\$59.31	\$5,204.25	8.059
20	0	\$0.00	\$179.44	\$55.95	\$5,260.20	8.059
21	0	\$0.00	\$179.44	\$52.78	\$5,312.99	8.059
22	0	\$0.00	\$179.44	\$49.80	\$5,362.78	8.059
23	0	\$0.00	\$179.44	\$46.98	\$5,409.76	8.059
24	0	\$0.00	\$179.44	\$44.32	\$5,454.08	8.059
25	0	\$0.00	\$179.44	\$41.81	\$5,495.89	8.059
26	0	\$0.00	\$179.44	\$39.44	\$5,535.33	8.059
27	0	\$0.00	\$179.44	\$37.21	\$5,572.54	8.059
28	0	\$0.00	\$179.44	\$35.10	\$5,607.64	8.059
29	0	\$0.00	\$179.44	\$33.12	\$5,640.76	8.059
30	0	\$0.00	\$179.44	\$31.24	\$5,672.00	8.059
31	0	\$0.00	\$179.44	\$29.47	\$5,701.48	8.059
32	0	\$0.00	\$179.44	\$27.81	\$5,729.28	8.059
33	0	\$0.00	\$179.44	\$26.23	\$5,755.51	8.059
34	0	\$0.00	\$179.44	\$24.75	\$5,780.26	8.059
35	0	\$0.00	\$179.44	\$23.35	\$5,803.61	8.059
36	0	\$0.00	\$179.44	\$22.02	\$5,825.63	8.059
37	0	\$0.00	\$179.44	\$20.78	\$5,846.41	8.059
38	0	\$0.00	\$179.44	\$19.60	\$5,866.01	8.059
39	0	\$0.00	\$179.44	\$18.49	\$5,884.50	8.059
40	0	\$0.00	\$179.44	\$17.45	\$5,901.95	8.059
41	0	\$0.00	\$179.44	\$16.46	\$5,918.41	8.059
42	0	\$0.00	\$179.44	\$15.53	\$5,933.93	8.059
43	0	\$0.00	\$179.44	\$14.65	\$5,948.58	8.059
44	0	\$0.00	\$179.44	\$13.82	\$5,962.40	8.059
45	0	\$0.00	\$179.44	\$13.04	\$5,975.44	8.059
46	0	\$0.00	\$179.44	\$12.30	\$5,987.73	8.059

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47	0	\$0.00	\$179.44	\$11.60	\$5,999.34	8.059
48	0	\$0.00	\$179.44	\$10.95	\$6,010.28	8.059
49	0	\$0.00	\$179.44	\$10.33	\$6,020.61	8.059
50	0	\$0.00	\$179.44	\$9.74	\$6,030.35	8.059
51	0	\$0.00	\$179.44	\$9.19	\$6,039.54	8.059
52	0	\$0.00	\$179.44	\$8.67	\$6,048.21	8.059
53	0	\$0.00	\$179.44	\$8.18	\$6,056.39	8.059
54	0	\$0.00	\$179.44	\$7.72	\$6,064.11	8.059
55	0	\$0.00	\$179.44	\$7.28	\$6,071.38	8.059
56	0	\$0.00	\$179.44	\$6.87	\$6,078.25	8.059
57	0	\$0.00	\$179.44	\$6.48	\$6,084.73	8.059
58	0	\$0.00	\$179.44	\$6.11	\$6,090.84	8.059
59	0	\$0.00	\$179.44	\$5.77	\$6,096.61	8.059
60	0	\$0.00	\$179.44	\$5.44	\$6,102.05	8.059
Total BLDG cost	\$3,370.00	No replacements performed	Actual lifetime energy (MWh)		491.61	
Decom = 2%	\$67.40					
		Levelized Cost of Power (\$/kW)		\$6,169.45	include decom	
		All the above values are in units of \$ /kW				
		Levelized Cost of Energy – LCOE (\$/MWh)		\$44.61		Leve

Discounted yearly energy	Remarks
in MWh	Nuclear @6%
8.059	Initial construction
7.603	assumed
7.173	to take 5 years
6.767	
6.384	Total CAPEX = \$3,370 /kW
6.022	
5.681	Columns A through F
5.360	are nominal dollars
5.056	per kilowatt
4.770	of peak generating
4.500	capacity
4.245	
4.005	
3.778	
3.565	
3.363	
3.172	
2.993	
2.823	
2.664	
2.513	
2.371	
2.236	
2.110	
1.990	
1.878	
1.771	
1.671	
1.577	
1.487	
1.403	
1.324	
1.249	
1.178	
1.111	
1.049	
0.989	
0.933	
0.880	
0.831	
0.784	
0.739	
0.697	
0.658	
0.621	
0.586	
0.552	

0.521
0.492
0.464
0.438
0.413
0.389
0.367
0.347
0.327
0.308
0.291
0.275
0.259
0.244

138.31 Discounted lifetime energy (MWh)

mission from column A

lized cost of power

divided by
ted lifetime energy

yrs /1000 kW per MW)