

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

Sheet2

\$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

	<b>Actual Build cost</b>	<b>Discounted Build cost</b>	<b>Actual O&amp;M cost</b>	<b>Discounted O&amp;M cost</b>	<b>Cumulative cost</b>	<b>Yearly energy</b>
<b>Year n</b>	\$3,370 /kW					<b>average</b>
	\$700	\$700.00	\$179.44	\$179.44	\$879.44	8.059
1	\$700	\$700.00	\$179.44	\$179.44	\$1,758.88	8.059
2	\$700	\$700.00	\$179.44	\$179.44	\$2,638.32	8.059
3	\$700	\$700.00	\$179.44	\$179.44	\$3,517.76	8.059
4	\$570	\$570.00	\$179.44	\$179.44	\$4,267.20	8.059
5	0	0	\$179.44	\$179.44	\$4,446.64	8.059
6	0	0	\$179.44	\$179.44	\$4,626.08	8.059
7	0	0	\$179.44	\$179.44	\$4,805.52	8.059
8	0	0	\$179.44	\$179.44	\$4,984.96	8.059
9	0	0	\$179.44	\$179.44	\$5,164.40	8.059
10	0	0	\$179.44	\$179.44	\$5,343.84	8.059
11	0	0	\$179.44	\$179.44	\$5,523.28	8.059
12	0	0	\$179.44	\$179.44	\$5,702.72	8.059
13	0	0	\$179.44	\$179.44	\$5,882.16	8.059
14	0	0	\$179.44	\$179.44	\$6,061.60	8.059
15	0	0	\$179.44	\$179.44	\$6,241.04	8.059
16	0	0	\$179.44	\$179.44	\$6,420.48	8.059
17	0	0	\$179.44	\$179.44	\$6,599.92	8.059
18	0	0	\$179.44	\$179.44	\$6,779.36	8.059
19	0	0	\$179.44	\$179.44	\$6,958.80	8.059
20	0	0	\$179.44	\$179.44	\$7,138.24	8.059
21	0	0	\$179.44	\$179.44	\$7,317.68	8.059
22	0	0	\$179.44	\$179.44	\$7,497.12	8.059
23	0	0	\$179.44	\$179.44	\$7,676.56	8.059
24	0	0	\$179.44	\$179.44	\$7,856.00	8.059
25	0	0	\$179.44	\$179.44	\$8,035.44	8.059
26	0	0	\$179.44	\$179.44	\$8,214.88	8.059
27	0	0	\$179.44	\$179.44	\$8,394.32	8.059
28	0	0	\$179.44	\$179.44	\$8,573.76	8.059
29	0	0	\$179.44	\$179.44	\$8,753.20	8.059
30	0	0	\$179.44	\$179.44	\$8,932.64	8.059
31	0	0	\$179.44	\$179.44	\$9,112.08	8.059
32	0	0	\$179.44	\$179.44	\$9,291.52	8.059
33	0	0	\$179.44	\$179.44	\$9,470.96	8.059
34	0	0	\$179.44	\$179.44	\$9,650.40	8.059
35	0	0	\$179.44	\$179.44	\$9,829.84	8.059
36	0	0	\$179.44	\$179.44	\$10,009.28	8.059
37	0	0	\$179.44	\$179.44	\$10,188.72	8.059
38	0	0	\$179.44	\$179.44	\$10,368.16	8.059
39	0	0	\$179.44	\$179.44	\$10,547.60	8.059
40	0	0	\$179.44	\$179.44	\$10,727.04	8.059
41	0	0	\$179.44	\$179.44	\$10,906.48	8.059
42	0	0	\$179.44	\$179.44	\$11,085.92	8.059
43	0	0	\$179.44	\$179.44	\$11,265.36	8.059
44	0	0	\$179.44	\$179.44	\$11,444.80	8.059
45	0	0	\$179.44	\$179.44	\$11,624.24	8.059
46	0	0	\$179.44	\$179.44	\$11,803.68	8.059

Sheet1

47	0	0	\$179.44	\$179.44	\$11,983.12	8.059
48	0	0	\$179.44	\$179.44	\$12,162.56	8.059
49	0	0	\$179.44	\$179.44	\$12,342.00	8.059
50	0	0	\$179.44	\$179.44	\$12,521.44	8.059
51	0	0	\$179.44	\$179.44	\$12,700.88	8.059
52	0	0	\$179.44	\$179.44	\$12,880.32	8.059
53	0	0	\$179.44	\$179.44	\$13,059.76	8.059
54	0	0	\$179.44	\$179.44	\$13,239.20	8.059
55	0	0	\$179.44	\$179.44	\$13,418.64	8.059
56	0	0	\$179.44	\$179.44	\$13,598.08	8.059
57	0	0	\$179.44	\$179.44	\$13,777.52	8.059
58	0	0	\$179.44	\$179.44	\$13,956.96	8.059
59	0	0	\$179.44	\$179.44	\$14,136.40	8.059
60	0	0	\$179.44	\$179.44	\$14,315.84	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)		\$14,383.24	include decom
<b>All the above values are in units of \$ /kW</b>						
			Levelized Cost of Energy – LCOE (\$/MWh)		<b>\$29.26</b>	← → Leve

Sheet1

			discoun
Source is Nuclear w/ CF = 92%	0.92	8.0592	average yearly energy
Assumed discount rate is 0% /year			
Levelized Cost of Power in \$ /kW units	\$14,383.24		from Column F above, after year 60
Conversion factor from Power to Actual Energy	0.00206803		for CF = 0.92 Conversion = 1 ÷ (CF x 8760 h /yr x 60
<b>Levelized Cost of Energy</b>	<b>\$29.26 /MWh</b>	<b>LCOE</b>	

Discounted yearly energy	Remarks
in MWh	<b>Nuclear @ 0%</b>
8.059	Initial construction
8.059	assumed
8.059	to take 5 years
8.059	
8.059	Total CAPEX = \$3,370 /kW
8.059	
8.059	Columns A through F
8.059	are nominal dollars
8.059	per kilowatt
8.059	of peak generating
8.059	capacity
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491.61 Discounted lifetime energy (MWh)

mission from column A

lized cost of power

divided by  
ted lifetime energy

yrs /1000 kW per MW)