

Appendix B:

Task 3 - Analysis of Costs and Benefits: Detailed Cost and Benefit Result Tables

Massachusetts Net Metering and Solar Task Force

Revised 4/30/15 to include missing rows



Sustainable Energy
Advantage, LLC



La Capra Associates

NOP Costs and Benefits – SREC Capped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
Lease Payments	CB1.3	\$ 228.2	\$ 3.3	\$ 209.0	\$ 4.8
PILOTs / Property Taxes	CB1.4	\$ 152.6	\$ 2.2	\$ 148.1	\$ 3.4
Generation Value of On-site Generation	CB3.1	\$ 155.3	\$ 2.3	\$ 104.1	\$ 2.4
Transmission Value of On-site Generation	CB3.2	\$ 25.4	\$ 0.4	\$ 17.5	\$ 0.4
Distribution Value of On-site Generation	CB3.3	\$ 63.5	\$ 0.9	\$ 42.5	\$ 1.0
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 9.6	\$ 0.1	\$ 7.2	\$ 0.2
Offsetting On-site Usage	CB4.1	\$ 16.4	\$ 0.2	\$ 10.6	\$ 0.2
Virtual NM	CB4.2	\$ 476.0	\$ 6.9	\$ 476.0	\$ 10.9
Total		\$ 1,127.1	\$ 16.4	\$ 1,015.0	\$ 23.3

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
MA Income Taxes	CB1.6.b	\$ 59.2	\$ 0.9	\$ 52.3	\$ 1.2
Federal Income Taxes	CB1.7b	\$ 258.8	\$ 3.8	\$ 228.7	\$ 5.2
Total		\$ 318.0	\$ 4.6	\$ 280.9	\$ 6.4

NOP Costs and Benefits – SREC Uncapped

Benefits

C/B Component ↓	CB Code	1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits
Lease Payments	CB1.3	\$ 223.4	\$ 5.1
PILOTs / Property Taxes	CB1.4	\$ 160.7	\$ 3.7
Generation Value of On-site Generation	CB3.1	\$ 94.1	\$ 2.2
Transmission Value of On-site Generation	CB3.2	\$ 15.7	\$ 0.4
Distribution Value of On-site Generation	CB3.3	\$ 37.9	\$ 0.9
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 6.6	\$ 0.2
Offsetting On-site Usage	CB4.1	\$ 9.1	\$ 0.2
Virtual NM	CB4.2	\$ 525.0	\$ 12.1
Total		\$ 1,072.5	\$ 24.6

Costs

C/B Component ↓	CB Code	1600 MW	
		NPV Costs (Million \$)	NPV \$/MWh Costs
MA Income Taxes	CB1.6.b	\$ 53.0	\$ 1.2
Federal Income Taxes	CB1.7b	\$ 231.9	\$ 5.3
Total		\$ 284.9	\$ 6.5

NOP Costs and Benefits – Policy A Capped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
Lease Payments	CB1.3	\$ 304.3	\$ 4.3	\$ 222.7	\$ 5.0
PILOTs / Property Taxes	CB1.4	\$ 204.3	\$ 2.9	\$ 156.8	\$ 3.5
Generation Value of On-site Generation	CB3.1	\$ 167.8	\$ 2.4	\$ 104.8	\$ 2.3
Transmission Value of On-site Generation	CB3.2	\$ 24.9	\$ 0.4	\$ 17.3	\$ 0.4
Distribution Value of On-site Generation	CB3.3	\$ 63.9	\$ 0.9	\$ 42.3	\$ 0.9
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 10.8	\$ 0.2	\$ 7.3	\$ 0.2
Offsetting On-site Usage	CB4.1	\$ 10.2	\$ 0.1	\$ 9.0	\$ 0.2
Virtual NM	CB4.2	\$ 453.1	\$ 6.4	\$ 453.1	\$ 10.1
Total		\$ 1,239.3	\$ 17.6	\$ 1,013.3	\$ 22.7

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
MA Income Taxes	CB1.6.b	\$ 63.3	\$ 0.9	\$ 51.9	\$ 1.2
Federal Income Taxes	CB1.7b	\$ 277.0	\$ 3.9	\$ 227.1	\$ 5.1
Total		\$ 340.4	\$ 4.8	\$ 279.0	\$ 6.2

NOP Costs and Benefits – Policy A Uncapped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
Lease Payments	CB1.3	\$ 203.8	\$ 2.9	\$ 198.1	\$ 4.4
PILOTs / Property Taxes	CB1.4	\$ 146.8	\$ 2.1	\$ 142.9	\$ 3.2
Generation Value of On-site Generation	CB3.1	\$ 134.7	\$ 1.9	\$ 97.4	\$ 2.2
Transmission Value of On-site Generation	CB3.2	\$ 19.8	\$ 0.3	\$ 16.2	\$ 0.4
Distribution Value of On-site Generation	CB3.3	\$ 48.0	\$ 0.7	\$ 39.3	\$ 0.9
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 9.1	\$ 0.1	\$ 6.8	\$ 0.2
Offsetting On-site Usage	CB4.1	\$ 11.9	\$ 0.2	\$ 9.3	\$ 0.2
Virtual NM	CB4.2	\$ 659.1	\$ 9.4	\$ 497.8	\$ 11.1
Total		\$ 1,233.2	\$ 17.5	\$ 1,008.0	\$ 22.6

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
MA Income Taxes	CB1.6.b	\$ 36.6	\$ 0.5	\$ 49.0	\$ 1.1
Federal Income Taxes	CB1.7b	\$ 160.2	\$ 2.3	\$ 214.2	\$ 4.8
Total		\$ 196.8	\$ 2.8	\$ 263.2	\$ 5.9

NOP Costs and Benefits – Policy B Capped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
Lease Payments	CB1.3	\$ 299.1	\$ 4.2	\$ 222.4	\$ 5.0
PILOTs / Property Taxes	CB1.4	\$ 204.3	\$ 2.9	\$ 157.5	\$ 3.5
Generation Value of On-site Generation	CB3.1	\$ 160.1	\$ 2.3	\$ 102.2	\$ 2.3
Transmission Value of On-site Generation	CB3.2	\$ 25.9	\$ 0.4	\$ 17.0	\$ 0.4
Distribution Value of On-site Generation	CB3.3	\$ 66.6	\$ 0.9	\$ 41.9	\$ 0.9
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 10.3	\$ 0.1	\$ 7.1	\$ 0.2
Offsetting On-site Usage	CB4.1	\$ 11.8	\$ 0.2	\$ 9.2	\$ 0.2
Virtual NM	CB4.2	\$ 453.1	\$ 6.4	\$ 453.1	\$ 10.1
Total		\$ 1,231.0	\$ 17.5	\$ 1,010.3	\$ 22.6

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
MA Income Taxes	CB1.6.b	\$ 62.8	\$ 0.9	\$ 51.7	\$ 1.2
Federal Income Taxes	CB1.7b	\$ 274.7	\$ 3.9	\$ 226.0	\$ 5.1
Total		\$ 337.5	\$ 4.8	\$ 277.7	\$ 6.2

NOP Costs and Benefits – Policy B Uncapped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
Lease Payments	CB1.3	\$ 299.1	\$ 4.3	\$ 222.0	\$ 5.0
PILOTs / Property Taxes	CB1.4	\$ 213.2	\$ 3.0	\$ 159.5	\$ 3.6
Generation Value of On-site Generation	CB3.1	\$ 132.3	\$ 1.9	\$ 97.1	\$ 2.2
Transmission Value of On-site Generation	CB3.2	\$ 21.6	\$ 0.3	\$ 16.1	\$ 0.4
Distribution Value of On-site Generation	CB3.3	\$ 52.3	\$ 0.7	\$ 39.2	\$ 0.9
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 8.8	\$ 0.1	\$ 6.8	\$ 0.2
Offsetting On-site Usage	CB4.1	\$ 13.7	\$ 0.2	\$ 9.6	\$ 0.2
Virtual NM	CB4.2	\$ 775.5	\$ 11.0	\$ 520.4	\$ 11.7
Total		\$ 1,516.6	\$ 21.6	\$ 1,070.8	\$ 24.0

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
MA Income Taxes	CB1.6.b	\$ 45.7	\$ 0.7	\$ 53.0	\$ 1.2
Federal Income Taxes	CB1.7b	\$ 199.9	\$ 2.8	\$ 232.0	\$ 5.2
Total		\$ 245.7	\$ 3.5	\$ 285.0	\$ 6.4

CG Costs and Benefits – SREC Capped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
ROI (Aggregate Return to Debt & Equity)	CB1.5	\$ -	\$ -	\$ -	\$ -
MA Residential RE Tax Credit	CB1.6.a	\$ 134.0	\$ 1.9	\$ 56.7	\$ 1.3
Federal Incentives (ITC)	CB1.7a	\$ 1,304.8	\$ 18.9	\$ 1,258.7	\$ 28.9
Direct Incentives (e.g., SRECs)	CB2.1	\$ 4,373.7	\$ 63.5	\$ 3,565.2	\$ 81.8
Generation Value of On-site Generation	CB3.1	\$ 2,263.9	\$ 32.9	\$ 940.0	\$ 21.6
Transmission Value of On-site Generation	CB3.2	\$ 376.3	\$ 5.5	\$ 163.9	\$ 3.8
Distribution Value of On-site Generation	CB3.3	\$ 1,010.5	\$ 14.7	\$ 404.4	\$ 9.3
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 129.6	\$ 1.9	\$ 62.7	\$ 1.4
Offsetting On-site Usage	CB4.1	\$ 323.0	\$ 4.7	\$ 130.9	\$ 3.0
Virtual NM	CB4.2	\$ 2,563.0	\$ 37.2	\$ 2,563.0	\$ 58.8
Wholesale Market Sales	CB4.3	\$ 69.0	\$ 1.0	\$ 48.4	\$ 1.1
Avoided Generation Capacity Costs	CB5.3	\$ 120.1	\$ 1.7	\$ 77.8	\$ 1.8
Total		\$ 12,668.0	\$ 183.9	\$ 9,271.7	\$ 212.8

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
System Installed Costs	CB1.1	\$ 6,696.8	\$ 97.2	\$ 5,183.0	\$ 118.9
Ongoing O&M + Insurance Costs	CB1.2	\$ 1,382.7	\$ 20.1	\$ 980.3	\$ 22.5
Lease Payments	CB1.3	\$ 228.2	\$ 3.3	\$ 209.0	\$ 4.8
PILOTs / Property Taxes	CB1.4	\$ 152.6	\$ 2.2	\$ 148.1	\$ 3.4
MA Income Taxes	CB1.6.b	\$ 87.7	\$ 1.3	\$ 97.8	\$ 2.2
Federal Income Taxes	CB1.7b	\$ 383.7	\$ 5.6	\$ 427.9	\$ 9.8
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ -	\$ -	\$ -	\$ -
Total		\$ 8,931.6	\$ 129.7	\$ 7,046.2	\$ 161.7

CG Costs and Benefits – SREC Uncapped

Benefits

C/B Component ↓	CB Code	1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits
ROI (Aggregate Return to Debt & Equity)	CB1.5	\$ -	\$ -
MA Residential RE Tax Credit	CB1.6.a	\$ 42.4	\$ 1.0
Federal Incentives (ITC)	CB1.7a	\$ 1,258.1	\$ 28.9
Direct Incentives (e.g., SRECs)	CB2.1	\$ 3,526.7	\$ 81.0
Generation Value of On-site Generation	CB3.1	\$ 766.0	\$ 17.6
Transmission Value of On-site Generation	CB3.2	\$ 130.9	\$ 3.0
Distribution Value of On-site Generation	CB3.3	\$ 320.6	\$ 7.4
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 51.3	\$ 1.2
Offsetting On-site Usage	CB4.1	\$ 103.1	\$ 2.4
Virtual NM	CB4.2	\$ 2,891.5	\$ 66.4
Wholesale Market Sales	CB4.3	\$ -	\$ -
Avoided Generation Capacity Costs	CB5.3	\$ 77.9	\$ 1.8
Total		\$ 9,168.5	\$ 210.6

Costs

C/B Component ↓	CB Code	1600 MW	
		NPV Costs (Million \$)	NPV \$/MWh Costs
System Installed Costs	CB1.1	\$ 5,136.5	\$ 118.0
Ongoing O&M + Insurance Costs	CB1.2	\$ 986.7	\$ 22.7
Lease Payments	CB1.3	\$ 223.4	\$ 5.1
PILOTs / Property Taxes	CB1.4	\$ 160.7	\$ 3.7
MA Income Taxes	CB1.6.b	\$ 23.0	\$ 0.5
Federal Income Taxes	CB1.7b	\$ 100.8	\$ 2.3
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ -	\$ -
Total		\$ 6,631.2	\$ 152.3

CG Costs and Benefits – Policy A Capped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
ROI (Aggregate Return to Debt & Equity)	CB1.5	\$ -	\$ -	\$ -	\$ -
MA Residential RE Tax Credit	CB1.6.a	\$ 59.8	\$ 0.8	\$ 43.8	\$ 1.0
Federal Incentives (ITC)	CB1.7a	\$ 1,335.4	\$ 19.0	\$ 1,251.3	\$ 28.0
Direct Incentives (e.g., SRECs)	CB2.1	\$ 4,342.9	\$ 61.7	\$ 3,592.3	\$ 80.4
Generation Value of On-site Generation	CB3.1	\$ 1,462.9	\$ 20.8	\$ 836.4	\$ 18.7
Transmission Value of On-site Generation	CB3.2	\$ 213.3	\$ 3.0	\$ 138.6	\$ 3.1
Distribution Value of On-site Generation	CB3.3	\$ 551.3	\$ 7.8	\$ 343.0	\$ 7.7
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 90.3	\$ 1.3	\$ 55.9	\$ 1.3
Offsetting On-site Usage	CB4.1	\$ 114.2	\$ 1.6	\$ 94.9	\$ 2.1
Virtual NM	CB4.2	\$ 2,409.7	\$ 34.2	\$ 2,409.7	\$ 53.9
Wholesale Market Sales	CB4.3	\$ 841.1	\$ 11.9	\$ 226.7	\$ 5.1
Avoided Generation Capacity Costs	CB5.3	\$ 119.0	\$ 1.7	\$ 77.8	\$ 1.7
Total		\$ 11,540.0	\$ 163.8	\$ 9,070.2	\$ 202.9

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
System Installed Costs	CB1.1	\$ 6,267.7	\$ 89.0	\$ 5,094.3	\$ 114.0
Ongoing O&M + Insurance Costs	CB1.2	\$ 1,270.7	\$ 18.0	\$ 949.5	\$ 21.2
Lease Payments	CB1.3	\$ 304.3	\$ 4.3	\$ 222.7	\$ 5.0
PILOTs / Property Taxes	CB1.4	\$ 204.3	\$ 2.9	\$ 156.8	\$ 3.5
MA Income Taxes	CB1.6.b	\$ 222.2	\$ 3.2	\$ 123.1	\$ 2.8
Federal Income Taxes	CB1.7b	\$ 972.0	\$ 13.8	\$ 538.5	\$ 12.0
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ 71.2	\$ 1.0	\$ 17.9	\$ 0.4
Total		\$ 9,312.3	\$ 132.2	\$ 7,102.7	\$ 158.9

CG Costs and Benefits – Policy A Uncapped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
ROI (Aggregate Return to Debt & Equity)	CB1.5	\$ -	\$ -	\$ -	\$ -
MA Residential RE Tax Credit	CB1.6.a	\$ 58.8	\$ 0.8	\$ 43.2	\$ 1.0
Federal Incentives (ITC)	CB1.7a	\$ 1,337.1	\$ 19.0	\$ 1,256.4	\$ 28.1
Direct Incentives (e.g., SRECs)	CB2.1	\$ 3,830.3	\$ 54.5	\$ 3,446.4	\$ 77.2
Generation Value of On-site Generation	CB3.1	\$ 1,258.6	\$ 17.9	\$ 786.3	\$ 17.6
Transmission Value of On-site Generation	CB3.2	\$ 182.1	\$ 2.6	\$ 131.8	\$ 3.0
Distribution Value of On-site Generation	CB3.3	\$ 452.2	\$ 6.4	\$ 321.1	\$ 7.2
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 81.2	\$ 1.2	\$ 53.2	\$ 1.2
Offsetting On-site Usage	CB4.1	\$ 133.3	\$ 1.9	\$ 99.0	\$ 2.2
Virtual NM	CB4.2	\$ 3,513.1	\$ 50.0	\$ 2,687.3	\$ 60.2
Wholesale Market Sales	CB4.3	\$ -	\$ -	\$ -	\$ -
Avoided Generation Capacity Costs	CB5.3	\$ 119.2	\$ 1.7	\$ 77.8	\$ 1.7
Total		\$ 10,966.0	\$ 156.0	\$ 8,902.6	\$ 199.3

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
System Installed Costs	CB1.1	\$ 6,236.8	\$ 88.7	\$ 5,085.4	\$ 113.9
Ongoing O&M + Insurance Costs	CB1.2	\$ 879.3	\$ 12.5	\$ 859.7	\$ 19.2
Lease Payments	CB1.3	\$ 203.8	\$ 2.9	\$ 198.1	\$ 4.4
PILOTs / Property Taxes	CB1.4	\$ 146.8	\$ 2.1	\$ 142.9	\$ 3.2
MA Income Taxes	CB1.6.b	\$ 211.0	\$ 3.0	\$ 85.7	\$ 1.9
Federal Income Taxes	CB1.7b	\$ 922.9	\$ 13.1	\$ 375.1	\$ 8.4
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ 69.9	\$ 1.0	\$ 16.4	\$ 0.4
Total		\$ 8,670.5	\$ 123.3	\$ 6,763.3	\$ 151.4

CG Costs and Benefits – Policy B Capped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
ROI (Aggregate Return to Debt & Equity)	CB1.5	\$ -	\$ -	\$ -	\$ -
MA Residential RE Tax Credit	CB1.6.a	\$ 60.0	\$ 0.9	\$ 43.8	\$ 1.0
Federal Incentives (ITC)	CB1.7a	\$ 1,325.7	\$ 18.8	\$ 1,248.6	\$ 27.9
Direct Incentives (e.g., SRECs)	CB2.1	\$ 4,173.2	\$ 59.2	\$ 3,577.5	\$ 80.0
Generation Value of On-site Generation	CB3.1	\$ 1,468.3	\$ 20.8	\$ 827.0	\$ 18.5
Transmission Value of On-site Generation	CB3.2	\$ 228.2	\$ 3.2	\$ 138.9	\$ 3.1
Distribution Value of On-site Generation	CB3.3	\$ 575.3	\$ 8.2	\$ 344.1	\$ 7.7
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 91.2	\$ 1.3	\$ 55.4	\$ 1.2
Offsetting On-site Usage	CB4.1	\$ 131.0	\$ 1.9	\$ 99.5	\$ 2.2
Virtual NM	CB4.2	\$ 2,409.7	\$ 34.2	\$ 2,409.7	\$ 53.9
Wholesale Market Sales	CB4.3	\$ 838.6	\$ 11.9	\$ 234.9	\$ 5.3
Avoided Generation Capacity Costs	CB5.3	\$ 119.2	\$ 1.7	\$ 77.8	\$ 1.7
Total		\$ 11,420.4	\$ 162.1	\$ 9,057.2	\$ 202.6

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
System Installed Costs	CB1.1	\$ 6,224.5	\$ 88.4	\$ 5,086.3	\$ 113.8
Ongoing O&M + Insurance Costs	CB1.2	\$ 1,315.2	\$ 18.7	\$ 964.8	\$ 21.6
Lease Payments	CB1.3	\$ 299.1	\$ 4.2	\$ 222.4	\$ 5.0
PILOTs / Property Taxes	CB1.4	\$ 204.3	\$ 2.9	\$ 157.5	\$ 3.5
MA Income Taxes	CB1.6.b	\$ 188.9	\$ 2.7	\$ 118.0	\$ 2.6
Federal Income Taxes	CB1.7b	\$ 826.5	\$ 11.7	\$ 510.3	\$ 11.4
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ -	\$ -	\$ -	\$ -
Total		\$ 9,058.4	\$ 128.6	\$ 7,059.2	\$ 157.9

CG Costs and Benefits – Policy B Uncapped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
ROI (Aggregate Return to Debt & Equity)	CB1.5	\$ -	\$ -	\$ -	\$ -
MA Residential RE Tax Credit	CB1.6.a	\$ 59.1	\$ 0.8	\$ 43.4	\$ 1.0
Federal Incentives (ITC)	CB1.7a	\$ 1,334.5	\$ 19.0	\$ 1,255.7	\$ 28.1
Direct Incentives (e.g., SRECs)	CB2.1	\$ 3,418.6	\$ 48.6	\$ 3,496.4	\$ 78.3
Generation Value of On-site Generation	CB3.1	\$ 1,277.5	\$ 18.2	\$ 788.0	\$ 17.6
Transmission Value of On-site Generation	CB3.2	\$ 203.9	\$ 2.9	\$ 132.3	\$ 3.0
Distribution Value of On-site Generation	CB3.3	\$ 492.0	\$ 7.0	\$ 323.5	\$ 7.2
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 81.3	\$ 1.2	\$ 53.2	\$ 1.2
Offsetting On-site Usage	CB4.1	\$ 159.0	\$ 2.3	\$ 105.2	\$ 2.4
Virtual NM	CB4.2	\$ 4,197.8	\$ 59.7	\$ 2,842.0	\$ 63.6
Wholesale Market Sales	CB4.3	\$ -	\$ -	\$ -	\$ -
Avoided Generation Capacity Costs	CB5.3	\$ 119.3	\$ 1.7	\$ 77.8	\$ 1.7
Total		\$ 11,342.9	\$ 161.3	\$ 9,117.4	\$ 204.2

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
System Installed Costs	CB1.1	\$ 6,274.2	\$ 89.2	\$ 5,095.9	\$ 114.1
Ongoing O&M + Insurance Costs	CB1.2	\$ 1,365.4	\$ 19.4	\$ 976.1	\$ 21.9
Lease Payments	CB1.3	\$ 299.1	\$ 4.3	\$ 222.0	\$ 5.0
PILOTs / Property Taxes	CB1.4	\$ 213.2	\$ 3.0	\$ 159.5	\$ 3.6
MA Income Taxes	CB1.6.b	\$ 236.6	\$ 3.4	\$ 91.9	\$ 2.1
Federal Income Taxes	CB1.7b	\$ 1,035.3	\$ 14.7	\$ 402.0	\$ 9.0
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ -	\$ -	\$ -	\$ -
Total		\$ 9,423.8	\$ 134.0	\$ 6,947.4	\$ 155.6

NPR Costs and Benefits – SREC Capped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
MA Income Taxes	CB1.6.b	\$ 146.9	\$ 2.1	\$ 150.1	\$ 3.4
Displaced RPS Class I Compliance Costs	CB2.3	\$ 1,471.6	\$ 21.4	\$ 921.8	\$ 21.2
Generation Value of On-site Generation	CB3.1	\$ 135.1	\$ 2.0	\$ 58.3	\$ 1.3
Wholesale Market Sales	CB4.3	\$ 3.9	\$ 0.1	\$ 2.7	\$ 0.1
Wholesale Market Price Impacts - Energy	CB5.1	\$ 54.4	\$ 0.8	\$ 64.4	\$ 1.5
Avoided Generation Capacity Costs	CB5.3	\$ 2,064.4	\$ 30.0	\$ 1,551.2	\$ 35.6
Avoided Transmission Tariff Charges	CB5.5	\$ 167.0	\$ 2.4	\$ 148.4	\$ 3.4
Avoided Trans. Investment - Remote Wind	CB6.1	\$ 181.8	\$ 2.6	\$ 112.5	\$ 2.6
Avoided Transmission Investment - Local	CB6.2	\$ 102.5	\$ 1.5	\$ 88.6	\$ 2.0
Avoided Distribution Investment	CB6.3	\$ 232.4	\$ 3.4	\$ 200.9	\$ 4.6
Avoided Environmental Impacts	CB7.1	\$ 710.8	\$ 10.3	\$ 660.0	\$ 15.1
Total		\$ 5,270.6	\$ 76.5	\$ 3,958.8	\$ 90.9

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
MA Residential RE Tax Credit	CB1.6.a	\$ 134.0	\$ 1.9	\$ 56.7	\$ 1.3
Direct Incentives (e.g., SRECs)	CB2.1	\$ 4,884.4	\$ 70.9	\$ 3,871.4	\$ 88.8
Other Solar Policy Compliance Costs (e.g. SACP)	CB2.2	\$ 200.0	\$ 2.9	\$ 175.7	\$ 4.0
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ -	\$ -	\$ -	\$ -
Transmission Value of On-site Generation	CB3.2	\$ 401.7	\$ 5.8	\$ 181.4	\$ 4.2
Distribution Value of On-site Generation	CB3.3	\$ 1,074.0	\$ 15.6	\$ 446.9	\$ 10.3
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 125.1	\$ 1.8	\$ 63.1	\$ 1.4
Offsetting On-site Usage	CB4.1	\$ 182.4	\$ 2.6	\$ 78.6	\$ 1.8
Virtual NM	CB4.2	\$ 1,756.2	\$ 25.5	\$ 1,751.3	\$ 40.2
Total		\$ 8,757.8	\$ 127.1	\$ 6,625.1	\$ 152.0

NPR Costs and Benefits – SREC Uncapped

Benefits

C/B Component ↓	CB Code	1600 MW	
		NPV Benefits	NPV \$/MWh Benefits
MA Income Taxes	CB1.6.b	\$ 76.1	\$ 1.7
Displaced RPS Class I Compliance Costs	CB2.3	\$ 893.5	\$ 20.5
Generation Value of On-site Generation	CB3.1	\$ 48.0	\$ 1.1
Wholesale Market Sales	CB4.3	\$ -	\$ -
Wholesale Market Price Impacts - Energy	CB5.1	\$ 64.4	\$ 1.5
Avoided Generation Capacity Costs	CB5.3	\$ 1,549.3	\$ 35.6
Avoided Transmission Tariff Charges	CB5.5	\$ 148.2	\$ 3.4
Avoided Trans. Investment - Remote Wind	CB6.1	\$ 112.5	\$ 2.6
Avoided Transmission Investment - Local	CB6.2	\$ 88.5	\$ 2.0
Avoided Distribution Investment	CB6.3	\$ 200.6	\$ 4.6
Avoided Environmental Impacts	CB7.1	\$ 660.0	\$ 15.2
Total		\$ 3,841.1	\$ 88.2

Costs

C/B Component ↓	CB Code	1600 MW	
		NPV Costs (Million \$)	NPV \$/MWh Costs
MA Residential RE Tax Credit	CB1.6.a	\$ 42.4	\$ 1.0
Direct Incentives (e.g., SRECs)	CB2.1	\$ 3,812.7	\$ 87.6
Other Solar Policy Compliance Costs (e.g. SACP)	CB2.2	\$ 167.1	\$ 3.8
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ -	\$ -
Transmission Value of On-site Generation	CB3.2	\$ 146.6	\$ 3.4
Distribution Value of On-site Generation	CB3.3	\$ 358.6	\$ 8.2
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 52.2	\$ 1.2
Offsetting On-site Usage	CB4.1	\$ 60.3	\$ 1.4
Virtual NM	CB4.2	\$ 1,920.0	\$ 44.1
Total		\$ 6,559.9	\$ 150.7

NPR Costs and Benefits – Policy A Capped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
MA Income Taxes	CB1.6.b	\$ 285.5	\$ 4.1	\$ 175.0	\$ 3.9
Displaced RPS Class I Compliance Costs	CB2.3	\$ 1,552.6	\$ 22.0	\$ 961.4	\$ 21.5
Generation Value of On-site Generation	CB3.1	\$ 91.1	\$ 1.3	\$ 52.6	\$ 1.2
Wholesale Market Sales	CB4.3	\$ 47.0	\$ 0.7	\$ 12.7	\$ 0.3
Wholesale Market Price Impacts - Energy	CB5.1	\$ 54.4	\$ 0.8	\$ 64.4	\$ 1.4
Avoided Generation Capacity Costs	CB5.3	\$ 2,103.3	\$ 29.9	\$ 1,552.6	\$ 34.7
Avoided Transmission Tariff Charges	CB5.5	\$ 172.6	\$ 2.4	\$ 148.4	\$ 3.3
Avoided Trans. Investment - Remote Wind	CB6.1	\$ 181.8	\$ 2.6	\$ 112.5	\$ 2.5
Avoided Transmission Investment - Local	CB6.2	\$ 107.3	\$ 1.5	\$ 90.7	\$ 2.0
Avoided Distribution Investment	CB6.3	\$ 243.2	\$ 3.5	\$ 205.6	\$ 4.6
Avoided Environmental Impacts	CB7.1	\$ 710.8	\$ 10.1	\$ 660.0	\$ 14.8
Total		\$ 5,549.5	\$ 78.8	\$ 4,035.8	\$ 90.3

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
MA Residential RE Tax Credit	CB1.6.a	\$ 59.8	\$ 0.8	\$ 43.8	\$ 1.0
Direct Incentives (e.g., SRECs)	CB2.1	\$ 4,589.4	\$ 65.2	\$ 3,838.8	\$ 85.9
Other Solar Policy Compliance Costs (e.g. SACP)	CB2.2	\$ 191.1	\$ 2.7	\$ 191.1	\$ 4.3
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ 197.4	\$ 2.8	\$ 63.5	\$ 1.4
Transmission Value of On-site Generation	CB3.2	\$ 238.2	\$ 3.4	\$ 155.9	\$ 3.5
Distribution Value of On-site Generation	CB3.3	\$ 615.2	\$ 8.7	\$ 385.3	\$ 8.6
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 91.0	\$ 1.3	\$ 56.9	\$ 1.3
Offsetting On-site Usage	CB4.1	\$ 52.7	\$ 0.7	\$ 52.6	\$ 1.2
Virtual NM	CB4.2	\$ 1,668.0	\$ 23.7	\$ 1,663.5	\$ 37.2
Total		\$ 7,702.9	\$ 109.4	\$ 6,451.3	\$ 144.3

NPR Costs and Benefits – Policy A Uncapped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
MA Income Taxes	CB1.6.b	\$ 247.6	\$ 3.5	\$ 134.7	\$ 3.0
Displaced RPS Class I Compliance Costs	CB2.3	\$ 1,515.0	\$ 21.5	\$ 949.6	\$ 21.3
Generation Value of On-site Generation	CB3.1	\$ 77.8	\$ 1.1	\$ 49.4	\$ 1.1
Wholesale Market Sales	CB4.3	\$ -	\$ -	\$ -	\$ -
Wholesale Market Price Impacts - Energy	CB5.1	\$ 54.4	\$ 0.8	\$ 64.4	\$ 1.4
Avoided Generation Capacity Costs	CB5.3	\$ 2,101.6	\$ 29.9	\$ 1,551.2	\$ 34.7
Avoided Transmission Tariff Charges	CB5.5	\$ 172.3	\$ 2.5	\$ 148.2	\$ 3.3
Avoided Trans. Investment - Remote Wind	CB6.1	\$ 181.8	\$ 2.6	\$ 112.5	\$ 2.5
Avoided Transmission Investment - Local	CB6.2	\$ 106.9	\$ 1.5	\$ 90.5	\$ 2.0
Avoided Distribution Investment	CB6.3	\$ 242.3	\$ 3.4	\$ 205.1	\$ 4.6
Avoided Environmental Impacts	CB7.1	\$ 710.8	\$ 10.1	\$ 660.0	\$ 14.8
Total		\$ 5,410.4	\$ 76.9	\$ 3,965.6	\$ 88.8

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
MA Residential RE Tax Credit	CB1.6.a	\$ 58.8	\$ 0.8	\$ 43.2	\$ 1.0
Direct Incentives (e.g., SRECs)	CB2.1	\$ 4,080.3	\$ 58.0	\$ 3,696.4	\$ 82.8
Other Solar Policy Compliance Costs (e.g. SACP)	CB2.2	\$ 191.7	\$ 2.7	\$ 191.7	\$ 4.3
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ 108.1	\$ 1.5	\$ 61.8	\$ 1.4
Transmission Value of On-site Generation	CB3.2	\$ 201.9	\$ 2.9	\$ 148.0	\$ 3.3
Distribution Value of On-site Generation	CB3.3	\$ 500.3	\$ 7.1	\$ 360.4	\$ 8.1
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 81.3	\$ 1.2	\$ 54.1	\$ 1.2
Offsetting On-site Usage	CB4.1	\$ 52.9	\$ 0.8	\$ 52.7	\$ 1.2
Virtual NM	CB4.2	\$ 1,652.6	\$ 23.5	\$ 1,648.1	\$ 36.9
Total		\$ 6,927.9	\$ 98.5	\$ 6,256.5	\$ 140.1

NPR Costs and Benefits – Policy B Capped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
MA Income Taxes	CB1.6.b	\$ 251.7	\$ 3.6	\$ 169.7	\$ 3.8
Displaced RPS Class I Compliance Costs	CB2.3	\$ 1,555.7	\$ 22.1	\$ 960.7	\$ 21.5
Generation Value of On-site Generation	CB3.1	\$ 90.9	\$ 1.3	\$ 51.9	\$ 1.2
Wholesale Market Sales	CB4.3	\$ 46.8	\$ 0.7	\$ 13.1	\$ 0.3
Wholesale Market Price Impacts - Energy	CB5.1	\$ 54.4	\$ 0.8	\$ 64.4	\$ 1.4
Avoided Generation Capacity Costs	CB5.3	\$ 2,100.5	\$ 29.8	\$ 1,552.8	\$ 34.7
Avoided Transmission Tariff Charges	CB5.5	\$ 172.2	\$ 2.4	\$ 148.6	\$ 3.3
Avoided Trans. Investment - Remote Wind	CB6.1	\$ 181.8	\$ 2.6	\$ 112.5	\$ 2.5
Avoided Transmission Investment - Local	CB6.2	\$ 107.1	\$ 1.5	\$ 90.8	\$ 2.0
Avoided Distribution Investment	CB6.3	\$ 242.8	\$ 3.4	\$ 205.8	\$ 4.6
Avoided Environmental Impacts	CB7.1	\$ 710.8	\$ 10.1	\$ 660.0	\$ 14.8
Total		\$ 5,514.8	\$ 78.3	\$ 4,030.4	\$ 90.2

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
MA Residential RE Tax Credit	CB1.6.a	\$ 60.0	\$ 0.9	\$ 43.8	\$ 1.0
Direct Incentives (e.g., SRECs)	CB2.1	\$ 4,419.7	\$ 62.7	\$ 3,824.0	\$ 85.5
Other Solar Policy Compliance Costs (e.g. SACP)	CB2.2	\$ 191.1	\$ 2.7	\$ 191.1	\$ 4.3
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ 85.3	\$ 1.2	\$ 30.3	\$ 0.7
Transmission Value of On-site Generation	CB3.2	\$ 254.0	\$ 3.6	\$ 156.0	\$ 3.5
Distribution Value of On-site Generation	CB3.3	\$ 641.9	\$ 9.1	\$ 386.0	\$ 8.6
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 91.6	\$ 1.3	\$ 56.2	\$ 1.3
Offsetting On-site Usage	CB4.1	\$ 76.9	\$ 1.1	\$ 58.8	\$ 1.3
Virtual NM	CB4.2	\$ 1,668.0	\$ 23.7	\$ 1,663.5	\$ 37.2
Total		\$ 7,488.5	\$ 106.3	\$ 6,409.7	\$ 143.4

NPR Costs and Benefits – Policy B Uncapped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
MA Income Taxes	CB1.6.b	\$ 282.3	\$ 4.0	\$ 144.9	\$ 3.2
Displaced RPS Class I Compliance Costs	CB2.3	\$ 1,520.2	\$ 21.6	\$ 950.2	\$ 21.3
Generation Value of On-site Generation	CB3.1	\$ 78.7	\$ 1.1	\$ 49.4	\$ 1.1
Wholesale Market Sales	CB4.3	\$ -	\$ -	\$ -	\$ -
Wholesale Market Price Impacts - Energy	CB5.1	\$ 54.4	\$ 0.8	\$ 64.4	\$ 1.4
Avoided Generation Capacity Costs	CB5.3	\$ 2,100.7	\$ 29.9	\$ 1,551.3	\$ 34.7
Avoided Transmission Tariff Charges	CB5.5	\$ 172.2	\$ 2.4	\$ 148.3	\$ 3.3
Avoided Trans. Investment - Remote Wind	CB6.1	\$ 181.8	\$ 2.6	\$ 112.5	\$ 2.5
Avoided Transmission Investment - Local	CB6.2	\$ 106.9	\$ 1.5	\$ 90.6	\$ 2.0
Avoided Distribution Investment	CB6.3	\$ 242.2	\$ 3.4	\$ 205.3	\$ 4.6
Avoided Environmental Impacts	CB7.1	\$ 710.8	\$ 10.1	\$ 660.0	\$ 14.8
Total		\$ 5,450.2	\$ 77.5	\$ 3,977.0	\$ 89.1

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
MA Residential RE Tax Credit	CB1.6.a	\$ 59.1	\$ 0.8	\$ 43.4	\$ 1.0
Direct Incentives (e.g., SRECs)	CB2.1	\$ 3,668.6	\$ 52.2	\$ 3,599.4	\$ 80.6
Other Solar Policy Compliance Costs (e.g. SACP)	CB2.2	\$ 191.7	\$ 2.7	\$ 191.7	\$ 4.3
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ 85.1	\$ 1.2	\$ 30.2	\$ 0.7
Transmission Value of On-site Generation	CB3.2	\$ 225.6	\$ 3.2	\$ 148.4	\$ 3.3
Distribution Value of On-site Generation	CB3.3	\$ 544.3	\$ 7.7	\$ 362.7	\$ 8.1
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 81.5	\$ 1.2	\$ 54.0	\$ 1.2
Offsetting On-site Usage	CB4.1	\$ 90.0	\$ 1.3	\$ 61.4	\$ 1.4
Virtual NM	CB4.2	\$ 2,742.0	\$ 39.0	\$ 1,885.7	\$ 42.2
Total		\$ 7,687.9	\$ 109.3	\$ 6,376.9	\$ 142.8

C@L Costs and Benefits – SREC Capped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
System Installed Costs	CB1.1	\$ 2,812.6	\$ 40.8	\$ 2,176.9	\$ 50.0
Ongoing O&M + Insurance Costs	CB1.2	\$ 884.9	\$ 12.8	\$ 627.4	\$ 14.4
Lease Payments	CB1.3	\$ 228.2	\$ 3.3	\$ 209.0	\$ 4.8
PILOTs / Property Taxes	CB1.4	\$ 152.6	\$ 2.2	\$ 148.1	\$ 3.4
ROI (Aggregate Return to Debt & Equity)	CB1.5	\$ 1,120.9	\$ 16.3	\$ 667.7	\$ 15.3
Federal Incentives (ITC)	CB1.7a	\$ 195.7	\$ 2.8	\$ 188.8	\$ 4.3
Displaced RPS Class I Compliance Costs	CB2.3	\$ 1,471.6	\$ 21.4	\$ 921.8	\$ 21.2
Generation Value of On-site Generation	CB3.1	\$ 2,554.3	\$ 37.1	\$ 1,102.4	\$ 25.3
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 14.2	\$ 0.2	\$ 6.8	\$ 0.2
Offsetting On-site Usage	CB4.1	\$ 157.0	\$ 2.3	\$ 62.9	\$ 1.4
Virtual NM	CB4.2	\$ 1,282.7	\$ 18.6	\$ 1,287.7	\$ 29.6
Wholesale Market Sales	CB4.3	\$ 72.9	\$ 1.1	\$ 51.1	\$ 1.2
Wholesale Market Price Impacts - Energy	CB5.1	\$ 54.4	\$ 0.8	\$ 64.4	\$ 1.5
Avoided Generation Capacity Costs	CB5.3	\$ 2,184.5	\$ 31.7	\$ 1,629.0	\$ 37.4
Avoided Transmission Tariff Charges	CB5.5	\$ 167.0	\$ 2.4	\$ 148.4	\$ 3.4
Avoided Trans. Investment - Remote Wind	CB6.1	\$ 181.8	\$ 2.6	\$ 112.5	\$ 2.6
Avoided Transmission Investment - Local	CB6.2	\$ 102.5	\$ 1.5	\$ 88.6	\$ 2.0
Avoided Distribution Investment	CB6.3	\$ 232.4	\$ 3.4	\$ 200.9	\$ 4.6
Avoided Environmental Impacts	CB7.1	\$ 710.8	\$ 10.3	\$ 660.0	\$ 15.1
Total		\$ 14,581.0	\$ 211.7	\$ 10,354.3	\$ 237.6

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
Federal Income Taxes	CB1.7b	\$ 642.5	\$ 9.3	\$ 656.5	\$ 15.1
Direct Incentives (e.g., SRECs)	CB2.1	\$ 4,884.4	\$ 70.9	\$ 3,871.4	\$ 88.8
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ -	\$ -	\$ -	\$ -
Total		\$ 5,526.9	\$ 80.2	\$ 4,528.0	\$ 103.9

C@L Costs and Benefits – SREC Uncapped

Benefits

C/B Component ↓	CB Code	1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits
System Installed Costs	CB1.1	\$ 2,157.3	\$ 49.6
Ongoing O&M + Insurance Costs	CB1.2	\$ 631.5	\$ 14.5
Lease Payments	CB1.3	\$ 223.4	\$ 5.1
PILOTs / Property Taxes	CB1.4	\$ 160.7	\$ 3.7
ROI (Aggregate Return to Debt & Equity)	CB1.5	\$ 761.2	\$ 17.5
Federal Incentives (ITC)	CB1.7a	\$ 188.7	\$ 4.3
Displaced RPS Class I Compliance Costs	CB2.3	\$ 893.5	\$ 20.5
Generation Value of On-site Generation	CB3.1	\$ 908.1	\$ 20.9
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 5.8	\$ 0.1
Offsetting On-site Usage	CB4.1	\$ 51.9	\$ 1.2
Virtual NM	CB4.2	\$ 1,496.4	\$ 34.4
Wholesale Market Sales	CB4.3	\$ -	\$ -
Wholesale Market Price Impacts - Energy	CB5.1	\$ 64.4	\$ 1.5
Avoided Generation Capacity Costs	CB5.3	\$ 1,627.1	\$ 37.4
Avoided Transmission Tariff Charges	CB5.5	\$ 148.2	\$ 3.4
Avoided Trans. Investment - Remote Wind	CB6.1	\$ 112.5	\$ 2.6
Avoided Transmission Investment - Local	CB6.2		
Avoided Distribution Investment	CB6.3		
Avoided Environmental Impacts	CB7.1	\$ 660.0	\$ 15.2
Total		\$ 10,090.7	\$ 231.8

Costs

C/B Component ↓	CB Code	1600 MW	
		NPV Costs (Million \$)	NPV \$/MWh Costs
Federal Income Taxes	CB1.7b	\$ 332.8	\$ 7.6
Direct Incentives (e.g., SRECs)	CB2.1	\$ 3,812.7	\$ 87.6
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ -	\$ -
Total		\$ 4,145.4	\$ 95.2

C@L Costs and Benefits – Policy A Capped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
System Installed Costs	CB1.1	\$ 2,632.4	\$ 37.4	\$ 2,139.6	\$ 47.9
Ongoing O&M + Insurance Costs	CB1.2	\$ 813.2	\$ 11.5	\$ 607.7	\$ 13.6
Lease Payments	CB1.3	\$ 304.3	\$ 4.3	\$ 222.7	\$ 5.0
PILOTs / Property Taxes	CB1.4	\$ 204.3	\$ 2.9	\$ 156.8	\$ 3.5
ROI (Aggregate Return to Debt & Equity)	CB1.5	\$ 668.3	\$ 9.5	\$ 590.2	\$ 13.2
Federal Incentives (ITC)	CB1.7a	\$ 200.3	\$ 2.8	\$ 187.7	\$ 4.2
Displaced RPS Class I Compliance Costs	CB2.3	\$ 1,552.6	\$ 22.0	\$ 961.4	\$ 21.5
Generation Value of On-site Generation	CB3.1	\$ 1,721.8	\$ 24.4	\$ 993.7	\$ 22.2
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 10.1	\$ 0.1	\$ 6.3	\$ 0.1
Offsetting On-site Usage	CB4.1	\$ 71.6	\$ 1.0	\$ 51.3	\$ 1.1
Virtual NM	CB4.2	\$ 1,194.8	\$ 17.0	\$ 1,199.3	\$ 26.8
Wholesale Market Sales	CB4.3	\$ 888.1	\$ 12.6	\$ 239.3	\$ 5.4
Wholesale Market Price Impacts - Energy	CB5.1	\$ 54.4	\$ 0.8	\$ 64.4	\$ 1.4
Avoided Generation Capacity Costs	CB5.3	\$ 2,222.3	\$ 31.5	\$ 1,630.4	\$ 36.5
Avoided Transmission Tariff Charges	CB5.5	\$ 172.6	\$ 2.4	\$ 148.4	\$ 3.3
Avoided Trans. Investment - Remote Wind	CB6.1	\$ 181.8	\$ 2.6	\$ 112.5	\$ 2.5
Avoided Transmission Investment - Local	CB6.2	\$ 107.3	\$ 1.5	\$ 90.7	\$ 2.0
Avoided Distribution Investment	CB6.3	\$ 243.2	\$ 3.5	\$ 205.6	\$ 4.6
Avoided Environmental Impacts	CB7.1	\$ 710.8	\$ 10.1	\$ 660.0	\$ 14.8
Total		\$ 13,954.3	\$ 198.1	\$ 10,268.0	\$ 229.7

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
Federal Income Taxes	CB1.7b	\$ 1,249.0	\$ 17.7	\$ 765.6	\$ 17.1
Direct Incentives (e.g., SRECs)	CB2.1	\$ 4,589.4	\$ 65.2	\$ 3,838.8	\$ 85.9
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ 197.4	\$ 2.8	\$ 63.5	\$ 1.4
Total		\$ 6,035.8	\$ 85.7	\$ 4,667.9	\$ 104.4

C@L Costs and Benefits – Policy A Uncapped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
System Installed Costs	CB1.1	\$ 2,619.5	\$ 37.3	\$ 2,135.9	\$ 47.8
Ongoing O&M + Insurance Costs	CB1.2	\$ 562.7	\$ 8.0	\$ 550.2	\$ 12.3
Lease Payments	CB1.3	\$ 203.8	\$ 2.9	\$ 198.1	\$ 4.4
PILOTs / Property Taxes	CB1.4	\$ 146.8	\$ 2.1	\$ 142.9	\$ 3.2
ROI (Aggregate Return to Debt & Equity)	CB1.5	\$ 688.7	\$ 9.8	\$ 641.8	\$ 14.4
Federal Incentives (ITC)	CB1.7a	\$ 200.6	\$ 2.9	\$ 188.5	\$ 4.2
Displaced RPS Class I Compliance Costs	CB2.3	\$ 1,515.0	\$ 21.5	\$ 949.6	\$ 21.3
Generation Value of On-site Generation	CB3.1	\$ 1,471.1	\$ 20.9	\$ 933.1	\$ 20.9
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 9.0	\$ 0.1	\$ 6.0	\$ 0.1
Offsetting On-site Usage	CB4.1	\$ 92.3	\$ 1.3	\$ 55.6	\$ 1.2
Virtual NM	CB4.2	\$ 2,519.7	\$ 35.8	\$ 1,537.1	\$ 34.4
Wholesale Market Sales	CB4.3	\$ -	\$ -	\$ -	\$ -
Wholesale Market Price Impacts - Energy	CB5.1	\$ 54.4	\$ 0.8	\$ 64.4	\$ 1.4
Avoided Generation Capacity Costs	CB5.3	\$ 2,220.7	\$ 31.6	\$ 1,629.0	\$ 36.5
Avoided Transmission Tariff Charges	CB5.5	\$ 172.3	\$ 2.5	\$ 148.2	\$ 3.3
Avoided Trans. Investment - Remote Wind	CB6.1	\$ 181.8	\$ 2.6	\$ 112.5	\$ 2.5
Avoided Transmission Investment - Local	CB6.2	\$ 106.9	\$ 1.5	\$ 90.5	\$ 2.0
Avoided Distribution Investment	CB6.3	\$ 242.3	\$ 3.4	\$ 205.1	\$ 4.6
Avoided Environmental Impacts	CB7.1	\$ 710.8	\$ 10.1	\$ 660.0	\$ 14.8
Total		\$ 13,718.3	\$ 195.1	\$ 10,248.4	\$ 229.5

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
Federal Income Taxes	CB1.7b	\$ 1,083.1	\$ 15.4	\$ 589.3	\$ 13.2
Direct Incentives (e.g., SRECs)	CB2.1	\$ 4,080.3	\$ 58.0	\$ 3,696.4	\$ 82.8
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ 108.1	\$ 1.5	\$ 61.8	\$ 1.4
Total		\$ 5,271.6	\$ 75.0	\$ 4,347.5	\$ 97.3

C@L Costs and Benefits – Policy B Capped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
System Installed Costs	CB1.1	\$ 2,614.3	\$ 37.1	\$ 2,136.2	\$ 47.8
Ongoing O&M + Insurance Costs	CB1.2	\$ 841.7	\$ 11.9	\$ 617.5	\$ 13.8
Lease Payments	CB1.3	\$ 299.1	\$ 4.2	\$ 222.4	\$ 5.0
PILOTs / Property Taxes	CB1.4	\$ 204.3	\$ 2.9	\$ 157.5	\$ 3.5
ROI (Aggregate Return to Debt & Equity)	CB1.5	\$ 708.6	\$ 10.1	\$ 599.4	\$ 13.4
Federal Incentives (ITC)	CB1.7a	\$ 198.9	\$ 2.8	\$ 187.3	\$ 4.2
Displaced RPS Class I Compliance Costs	CB2.3	\$ 1,555.7	\$ 22.1	\$ 960.7	\$ 21.5
Generation Value of On-site Generation	CB3.1	\$ 1,719.3	\$ 24.4	\$ 981.1	\$ 21.9
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 9.9	\$ 0.1	\$ 6.3	\$ 0.1
Offsetting On-site Usage	CB4.1	\$ 65.9	\$ 0.9	\$ 49.9	\$ 1.1
Virtual NM	CB4.2	\$ 1,194.8	\$ 17.0	\$ 1,199.3	\$ 26.8
Wholesale Market Sales	CB4.3	\$ 885.5	\$ 12.6	\$ 248.0	\$ 5.5
Wholesale Market Price Impacts - Energy	CB5.1	\$ 54.4	\$ 0.8	\$ 64.4	\$ 1.4
Avoided Generation Capacity Costs	CB5.3	\$ 2,219.7	\$ 31.5	\$ 1,630.6	\$ 36.5
Avoided Transmission Tariff Charges	CB5.5	\$ 172.2	\$ 2.4	\$ 148.6	\$ 3.3
Avoided Trans. Investment - Remote Wind	CB6.1	\$ 181.8	\$ 2.6	\$ 112.5	\$ 2.5
Avoided Transmission Investment - Local	CB6.2	\$ 107.1	\$ 1.5	\$ 90.8	\$ 2.0
Avoided Distribution Investment	CB6.3	\$ 242.8	\$ 3.4	\$ 205.8	\$ 4.6
Avoided Environmental Impacts	CB7.1	\$ 710.8	\$ 10.1	\$ 660.0	\$ 14.8
Total		\$ 13,986.6	\$ 198.6	\$ 10,278.3	\$ 229.9

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
Federal Income Taxes	CB1.7b	\$ 1,101.2	\$ 15.6	\$ 736.4	\$ 16.5
Direct Incentives (e.g., SRECs)	CB2.1	\$ 4,419.7	\$ 62.7	\$ 3,824.0	\$ 85.5
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ 85.3	\$ 1.2	\$ 30.3	\$ 0.7
Total		\$ 5,606.2	\$ 79.6	\$ 4,590.7	\$ 102.7

C@L Costs and Benefits – Policy B Uncapped

Benefits

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Benefits (Million \$)	NPV \$/MWh Benefits	NPV Benefits (Million \$)	NPV \$/MWh Benefits
System Installed Costs	CB1.1	\$ 2,635.2	\$ 37.5	\$ 2,140.3	\$ 47.9
Ongoing O&M + Insurance Costs	CB1.2	\$ 873.8	\$ 12.4	\$ 624.7	\$ 14.0
Lease Payments	CB1.3	\$ 299.1	\$ 4.3	\$ 222.0	\$ 5.0
PILOTs / Property Taxes	CB1.4	\$ 213.2	\$ 3.0	\$ 159.5	\$ 3.6
ROI (Aggregate Return to Debt & Equity)	CB1.5	\$ 575.7	\$ 8.2	\$ 651.0	\$ 14.6
Federal Incentives (ITC)	CB1.7a	\$ 200.2	\$ 2.8	\$ 188.4	\$ 4.2
Displaced RPS Class I Compliance Costs	CB2.3	\$ 1,520.2	\$ 21.6	\$ 950.2	\$ 21.3
Generation Value of On-site Generation	CB3.1	\$ 1,488.6	\$ 21.2	\$ 934.5	\$ 20.9
Other Retail Bill Components (Trans., EE, RE)	CB3.4	\$ 8.7	\$ 0.1	\$ 6.0	\$ 0.1
Offsetting On-site Usage	CB4.1	\$ 82.6	\$ 1.2	\$ 53.4	\$ 1.2
Virtual NM	CB4.2	\$ 2,231.3	\$ 31.7	\$ 1,476.7	\$ 33.1
Wholesale Market Sales	CB4.3	\$ -	\$ -	\$ -	\$ -
Wholesale Market Price Impacts - Energy	CB5.1	\$ 54.4	\$ 0.8	\$ 64.4	\$ 1.4
Avoided Generation Capacity Costs	CB5.3	\$ 2,220.0	\$ 31.6	\$ 1,629.2	\$ 36.5
Avoided Transmission Tariff Charges	CB5.5	\$ 172.2	\$ 2.4	\$ 148.3	\$ 3.3
Avoided Trans. Investment - Remote Wind	CB6.1	\$ 181.8	\$ 2.6	\$ 112.5	\$ 2.5
Avoided Transmission Investment - Local	CB6.2	\$ 106.9	\$ 1.5	\$ 90.6	\$ 2.0
Avoided Distribution Investment	CB6.3	\$ 242.2	\$ 3.4	\$ 205.3	\$ 4.6
Avoided Environmental Impacts	CB7.1	\$ 710.8	\$ 10.1	\$ 660.0	\$ 14.8
Total		\$ 13,816.7	\$ 196.5	\$ 10,317.0	\$ 231.0

Costs

C/B Component ↓	CB Code	2500 MW		1600 MW	
		NPV Costs (Million \$)	NPV\$/MWh Costs	NPV Costs (Million \$)	NPV \$/MWh Costs
Federal Income Taxes	CB1.7b	\$ 1,235.2	\$ 17.6	\$ 634.0	\$ 14.2
Direct Incentives (e.g., SRECs)	CB2.1	\$ 3,668.6	\$ 52.2	\$ 3,599.4	\$ 80.6
Solar Policy Incr. Admin. & Transaction Costs	CB2.4	\$ 85.1	\$ 1.2	\$ 30.2	\$ 0.7
Total		\$ 4,989.0	\$ 71.0	\$ 4,263.7	\$ 95.5