

January 28, 2019

BY HAND DELIVERY AND ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

RE: Docket 4892 - Proposed 2019 Renewable Energy Growth Program Tariff and Rule Changes
Responses to PUC Data Requests – Set 4

Dear Ms. Massaro:

On behalf of National Grid,¹ I have enclosed the Company's responses to the Public Utilities Commission's (PUC) Fourth Set of Data Requests in the above-referenced docket.

Thank you for your attention to this matter. If you have any questions, please contact me at 781-907-2121.

Very truly yours,



Raquel J. Webster

Enclosures

cc: Docket 4892 Service List
Christy Hetherington, Esq.
Jon Hagopian, Esq.
John Bell, Division

¹ The Narragansett Electric Company d/b/a National Grid (National Grid or Company).

PUC 4-1

Request:

Please update the response to COMM 1-2, Docket 4774. If possible, please include the extension of the REG program to future years.

Response:

Please see attachment PUC 4-1 for the update to the response to COMM 1-2 in Docket 4774, which has been extended to include an additional 10 years of build at 40.0 MW per year. Please note a number of assumptions were used in the creation of the forecast out to the year 2053. Following are a list of the assumptions used:

- Using the first three program years, it is estimated to take 5 years from the enrollment time for all units to become operational, with 5% of the units becoming operational in the enrollment year, increasing to 28% in the second year, 71 in the third year, 89 in the fourth and finally 100% in the fifth year.
- Administrative costs are forecasted at \$1.7 million for program year ended 2020, with a 2% uplift for wage and revenue requirement increases annually through 2025, and then declining by 5% each year thereafter, as the revenue requirement and labor costs decrease.
- Forward Capacity Market proceeds are included in the actuals, but were not included in the upcoming years as the Company did not have sufficient data or time to determine the volume of expected participation in the FCM.
- A forecast of energy market prices was used through the year 2022, after which the energy market prices were adjusted annually by the compound annual growth rate from the forecast, by technology.
- A forecast of REC Proxy amounts through 2022 was used, after which the REC Proxy amounts were adjusted annually by the compound annual growth rate from the forecast.
- Starting in program year 6, the forecasted tariff prices for all solar categories were adjusted down by 2.5% annually.
- The breakout of Small scale solar between the 15 year, 20 year, and Small Scale II solar was in all forecasted years was derived by taking the total allocation to small solar and allocating between the three groups based on historical actuals.

Renewable Energy Growth Program Cost Recovery
Summary of Costs by Year Through 2053

		Year 1 Y/E 3/31/2016 (a)	Year 2 Y/E 3/31/2017 (b)	Year 3 Y/E 3/31/2018 (c)	Year 4 Y/E 3/31/2019 (d)
(1) YEAR 1 BUILD	PBI Payments	\$25,378	\$938,601	\$5,089,744	\$6,272,407
(2) YEAR 1 BUILD	Market Value	\$0	\$30,336	\$950,427	\$1,657,058
(3) YEAR 1 BUILD	Net Cost	\$25,378	\$908,266	\$4,139,317	\$4,615,349
(4) YEAR 2 BUILD	PBI Payments	\$0	\$411,612	\$3,248,092	\$5,690,565
(5) YEAR 2 BUILD	Market Value	\$0	\$0	\$156,022	\$1,750,497
(6) YEAR 2 BUILD	Net Cost	\$0	\$411,612	\$3,092,070	\$3,940,068
(7) YEAR 3 BUILD	PBI Payments	\$0	\$0	\$0	\$5,689,390
(8) YEAR 3 BUILD	Market Value	\$0	\$0	\$0	\$1,763,969
(9) YEAR 3 BUILD	Net Cost	\$0	\$0	\$0	\$3,925,420
(10) YEAR 4 BUILD	PBI Payments	\$0	\$0	\$0	\$49,126
(11) YEAR 4 BUILD	Market Value	\$0	\$0	\$0	\$0
(12) YEAR 4 BUILD	Net Cost	\$0	\$0	\$0	\$49,126
(13) YEAR 5 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(14) YEAR 5 BUILD	Market Value	\$0	\$0	\$0	\$0
(15) YEAR 5 BUILD	Net Cost	\$0	\$0	\$0	\$0
(16) YEAR 6 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(17) YEAR 6 BUILD	Market Value	\$0	\$0	\$0	\$0
(18) YEAR 6 BUILD	Net Cost	\$0	\$0	\$0	\$0
(19) YEAR 7 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(20) YEAR 7 BUILD	Market Value	\$0	\$0	\$0	\$0
(21) YEAR 7 BUILD	Net Cost	\$0	\$0	\$0	\$0
(22) YEAR 8 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(23) YEAR 8 BUILD	Market Value	\$0	\$0	\$0	\$0
(24) YEAR 8 BUILD	Net Cost	\$0	\$0	\$0	\$0
(25) YEAR 9 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(26) YEAR 9 BUILD	Market Value	\$0	\$0	\$0	\$0
(27) YEAR 9 BUILD	Net Cost	\$0	\$0	\$0	\$0
(28) YEAR 10 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(29) YEAR 10 BUILD	Market Value	\$0	\$0	\$0	\$0
(30) YEAR 10 BUILD	Net Cost	\$0	\$0	\$0	\$0
(31) YEAR 11 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(32) YEAR 11 BUILD	Market Value	\$0	\$0	\$0	\$0
(33) YEAR 11 BUILD	Net Cost	\$0	\$0	\$0	\$0
(34) YEAR 12 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(35) YEAR 12 BUILD	Market Value	\$0	\$0	\$0	\$0
(36) YEAR 12 BUILD	Net Cost	\$0	\$0	\$0	\$0
(37) YEAR 13 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(38) YEAR 13 BUILD	Market Value	\$0	\$0	\$0	\$0
(39) YEAR 13 BUILD	Net Cost	\$0	\$0	\$0	\$0
(40) YEAR 14 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(41) YEAR 14 BUILD	Market Value	\$0	\$0	\$0	\$0
(42) YEAR 14 BUILD	Net Cost	\$0	\$0	\$0	\$0
(43) YEAR 15 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(44) YEAR 15 BUILD	Market Value	\$0	\$0	\$0	\$0
(45) YEAR 15 BUILD	Net Cost	\$0	\$0	\$0	\$0
(46) TOTAL	PBI Payments	\$25,378	\$1,350,213	\$8,337,836	\$17,701,488
(47) TOTAL	Market Value	\$0	\$30,336	\$1,106,449	\$5,171,525
(48) TOTAL	Net Cost	\$25,378	\$1,319,878	\$7,231,387	\$12,529,962
(49) Admin/Metering Costs		\$913,771	\$938,320	\$922,788	\$1,465,879
(50) Estimated Remuneration		\$444	\$23,629	\$145,912	\$309,776
(51) Total Estimated RE Growth Program Expense		\$939,593	\$2,281,826	\$8,300,087	\$14,305,617

Column and Line Notes:

- Column (a): Actual Yr 1 costs per Docket 4626, Schedule NG-3, Page 1, Line (2)
- Column (b): Actual Yr 2 costs per Docket 4707 Schedule ASC-3, Page 3, Line (22)
- Column (c): Actual Yr 3 costs per Docket 4847 Schedule NG-3 Revised, Page 3, Line (25)
- Column (d): Projected costs per RIPUC Docket 4847 RE Growth Program Year 2019 Schedule NG-2 Revised, Page 1, Line (6) + Estimated Remuneration
- Lines (1) through (45) and (50) Estimates based on estimated build in each year pages 11 through 25
- Columns (e) through (al):
- Line (49) Columns (e) through (al): Projected costs per RIPUC Docket 4792, Attachment PUC 1-4, Line (8) - Line (1)
- Line (51) Line (48) + Line (49) + Line (50)
- Column (am): Sum of Columns (a) through (al)

Renewable Energy Growth Program Cost Recovery
Summary of Costs by Year Through 2053

		Year 5 Y/E 3/31/2020 (e)	Year 6 Y/E 3/31/2021 (f)	Year 7 Y/E 3/31/2022 (g)	Year 8 Y/E 3/31/2023 (h)
(1) YEAR 1 BUILD	PBI Payments	\$7,019,877	\$7,019,877	\$7,019,877	\$7,019,877
(2) YEAR 1 BUILD	Market Value	\$1,744,272	\$1,744,272	\$1,744,272	\$1,744,272
(3) YEAR 1 BUILD	Net Cost	\$5,275,605	\$5,275,605	\$5,275,605	\$5,275,605
(4) YEAR 2 BUILD	PBI Payments	\$7,141,380	\$8,024,022	\$8,024,022	\$8,024,022
(5) YEAR 2 BUILD	Market Value	\$1,671,037	\$1,877,569	\$1,877,569	\$1,877,569
(6) YEAR 2 BUILD	Net Cost	\$5,470,343	\$6,146,453	\$6,146,453	\$6,146,453
(7) YEAR 3 BUILD	PBI Payments	\$6,578,086	\$8,257,400	\$9,277,978	\$9,277,978
(8) YEAR 3 BUILD	Market Value	\$1,763,969	\$2,214,292	\$801,146	\$801,146
(9) YEAR 3 BUILD	Net Cost	\$4,814,117	\$6,043,109	\$8,476,832	\$8,476,832
(10) YEAR 4 BUILD	PBI Payments	\$1,528,280	\$6,520,099	\$8,289,840	\$9,314,427
(11) YEAR 4 BUILD	Market Value	\$68,477	\$1,649,131	\$2,096,753	\$2,355,902
(12) YEAR 4 BUILD	Net Cost	\$1,459,802	\$4,870,968	\$6,193,087	\$6,958,525
(13) YEAR 5 BUILD	PBI Payments	\$896,633	\$4,699,023	\$9,138,881	\$14,777,845
(14) YEAR 5 BUILD	Market Value	\$200,409	\$1,050,292	\$1,908,169	\$3,303,039
(15) YEAR 5 BUILD	Net Cost	\$696,224	\$3,648,730	\$7,230,712	\$11,474,806
(16) YEAR 6 BUILD	PBI Payments	\$0	\$636,623	\$3,336,376	\$8,382,203
(17) YEAR 6 BUILD	Market Value	\$0	\$154,324	\$808,774	\$2,031,937
(18) YEAR 6 BUILD	Net Cost	\$0	\$482,299	\$2,527,602	\$6,350,266
(19) YEAR 7 BUILD	PBI Payments	\$0	\$0	\$624,184	\$3,271,187
(20) YEAR 7 BUILD	Market Value	\$0	\$0	\$159,947	\$838,242
(21) YEAR 7 BUILD	Net Cost	\$0	\$0	\$464,237	\$2,432,944
(22) YEAR 8 BUILD	PBI Payments	\$0	\$0	\$0	\$612,012
(23) YEAR 8 BUILD	Market Value	\$0	\$0	\$0	\$167,864
(24) YEAR 8 BUILD	Net Cost	\$0	\$0	\$0	\$444,148
(25) YEAR 9 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(26) YEAR 9 BUILD	Market Value	\$0	\$0	\$0	\$0
(27) YEAR 9 BUILD	Net Cost	\$0	\$0	\$0	\$0
(28) YEAR 10 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(29) YEAR 10 BUILD	Market Value	\$0	\$0	\$0	\$0
(30) YEAR 10 BUILD	Net Cost	\$0	\$0	\$0	\$0
(31) YEAR 11 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(32) YEAR 11 BUILD	Market Value	\$0	\$0	\$0	\$0
(33) YEAR 11 BUILD	Net Cost	\$0	\$0	\$0	\$0
(34) YEAR 12 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(35) YEAR 12 BUILD	Market Value	\$0	\$0	\$0	\$0
(36) YEAR 12 BUILD	Net Cost	\$0	\$0	\$0	\$0
(37) YEAR 13 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(38) YEAR 13 BUILD	Market Value	\$0	\$0	\$0	\$0
(39) YEAR 13 BUILD	Net Cost	\$0	\$0	\$0	\$0
(40) YEAR 14 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(41) YEAR 14 BUILD	Market Value	\$0	\$0	\$0	\$0
(42) YEAR 14 BUILD	Net Cost	\$0	\$0	\$0	\$0
(43) YEAR 15 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(44) YEAR 15 BUILD	Market Value	\$0	\$0	\$0	\$0
(45) YEAR 15 BUILD	Net Cost	\$0	\$0	\$0	\$0
(46) TOTAL	PBI Payments	\$23,164,257	\$35,157,045	\$45,711,159	\$60,679,550
(47) TOTAL	Market Value	\$5,448,165	\$8,689,881	\$9,396,630	\$13,119,971
(48) TOTAL	Net Cost	\$17,716,092	\$26,467,164	\$36,314,528	\$47,559,579
(49) Admin/Metering Costs		\$1,700,000	\$1,734,000	\$1,768,680	\$1,804,054
(50) Estimated Remuneration		\$405,374	\$615,248	\$799,945	\$1,061,892
(51) Total Estimated RE Growth Program Expense		\$19,821,466	\$28,816,412	\$38,883,153	\$50,425,524

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- Column (am): Sum of Columns (a) through (al)

Renewable Energy Growth Program Cost Recovery
Summary of Costs by Year Through 2053

		Year 9 Y/E 3/31/2024 (i)	Year 10 Y/E 3/31/2025 (j)	Year 11 Y/E 3/31/2026 (k)	Year 12 Y/E 3/31/2027 (l)
(1) YEAR 1 BUILD	PBI Payments	\$7,019,877	\$7,019,877	\$7,019,877	\$7,019,877
(2) YEAR 1 BUILD	Market Value	\$1,744,272	\$1,744,272	\$1,744,272	\$1,744,272
(3) YEAR 1 BUILD	Net Cost	\$5,275,605	\$5,275,605	\$5,275,605	\$5,275,605
(4) YEAR 2 BUILD	PBI Payments	\$8,024,022	\$8,024,022	\$8,024,022	\$8,024,022
(5) YEAR 2 BUILD	Market Value	\$1,877,569	\$1,877,569	\$1,877,569	\$1,877,569
(6) YEAR 2 BUILD	Net Cost	\$6,146,453	\$6,146,453	\$6,146,453	\$6,146,453
(7) YEAR 3 BUILD	PBI Payments	\$9,277,978	\$9,277,978	\$9,277,978	\$9,277,978
(8) YEAR 3 BUILD	Market Value	\$801,146	\$801,146	\$801,146	\$801,146
(9) YEAR 3 BUILD	Net Cost	\$8,476,832	\$8,476,832	\$8,476,832	\$8,476,832
(10) YEAR 4 BUILD	PBI Payments	\$9,314,427	\$9,314,427	\$9,314,427	\$9,314,427
(11) YEAR 4 BUILD	Market Value	\$2,355,902	\$2,355,902	\$2,355,902	\$2,355,902
(12) YEAR 4 BUILD	Net Cost	\$6,958,525	\$6,958,525	\$6,958,525	\$6,958,525
(13) YEAR 5 BUILD	PBI Payments	\$16,604,320	\$16,604,320	\$16,604,320	\$16,604,320
(14) YEAR 5 BUILD	Market Value	\$3,711,280	\$3,711,280	\$3,711,280	\$3,711,280
(15) YEAR 5 BUILD	Net Cost	\$12,893,040	\$12,893,040	\$12,893,040	\$12,893,040
(16) YEAR 6 BUILD	PBI Payments	\$10,492,490	\$11,789,314	\$11,789,314	\$11,789,314
(17) YEAR 6 BUILD	Market Value	\$2,543,493	\$2,857,858	\$2,857,858	\$2,857,858
(18) YEAR 6 BUILD	Net Cost	\$7,948,996	\$8,931,457	\$8,931,457	\$8,931,457
(19) YEAR 7 BUILD	PBI Payments	\$8,218,423	\$10,287,477	\$11,558,963	\$11,558,963
(20) YEAR 7 BUILD	Market Value	\$2,105,973	\$2,636,169	\$2,961,987	\$2,961,987
(21) YEAR 7 BUILD	Net Cost	\$6,112,450	\$7,651,309	\$8,596,976	\$8,596,976
(22) YEAR 8 BUILD	PBI Payments	\$3,207,394	\$8,058,154	\$10,086,859	\$11,333,549
(23) YEAR 8 BUILD	Market Value	\$879,730	\$2,210,206	\$2,766,643	\$3,108,588
(24) YEAR 8 BUILD	Net Cost	\$2,327,664	\$5,847,947	\$7,320,215	\$8,224,961
(25) YEAR 9 BUILD	PBI Payments	\$600,202	\$3,145,503	\$7,902,659	\$9,892,217
(26) YEAR 9 BUILD	Market Value	\$176,419	\$924,565	\$2,322,846	\$2,907,641
(27) YEAR 9 BUILD	Net Cost	\$423,783	\$2,220,938	\$5,579,812	\$6,984,575
(28) YEAR 10 BUILD	PBI Payments	\$0	\$588,707	\$3,085,263	\$7,751,314
(29) YEAR 10 BUILD	Market Value	\$0	\$186,146	\$975,545	\$2,450,928
(30) YEAR 10 BUILD	Net Cost	\$0	\$402,561	\$2,109,718	\$5,300,386
(31) YEAR 11 BUILD	PBI Payments	\$0	\$0	\$577,473	\$3,026,386
(32) YEAR 11 BUILD	Market Value	\$0	\$0	\$197,047	\$1,032,672
(33) YEAR 11 BUILD	Net Cost	\$0	\$0	\$380,426	\$1,993,714
(34) YEAR 12 BUILD	PBI Payments	\$0	\$0	\$0	\$566,522
(35) YEAR 12 BUILD	Market Value	\$0	\$0	\$0	\$209,261
(36) YEAR 12 BUILD	Net Cost	\$0	\$0	\$0	\$357,261
(37) YEAR 13 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(38) YEAR 13 BUILD	Market Value	\$0	\$0	\$0	\$0
(39) YEAR 13 BUILD	Net Cost	\$0	\$0	\$0	\$0
(40) YEAR 14 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(41) YEAR 14 BUILD	Market Value	\$0	\$0	\$0	\$0
(42) YEAR 14 BUILD	Net Cost	\$0	\$0	\$0	\$0
(43) YEAR 15 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(44) YEAR 15 BUILD	Market Value	\$0	\$0	\$0	\$0
(45) YEAR 15 BUILD	Net Cost	\$0	\$0	\$0	\$0
(46) TOTAL	PBI Payments	\$72,759,134	\$84,109,780	\$95,241,156	\$106,158,890
(47) TOTAL	Market Value	\$16,195,785	\$19,305,113	\$22,572,096	\$26,019,105
(48) TOTAL	Net Cost	\$56,563,349	\$64,804,667	\$72,669,060	\$80,139,786
(49) Admin/Metering Costs		\$1,840,135	\$1,876,937	\$1,783,090	\$1,693,936
(50) Estimated Remuneration		\$1,273,285	\$1,471,921	\$1,666,720	\$1,857,781
(51) Total Estimated RE Growth Program Expense		\$59,676,768	\$68,153,526	\$76,118,870	\$83,691,502

Column and Line Notes:

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- Line (51) Line (48) + Line (49) + Line (50)
- Column (am): Sum of Columns (a) through (al)

Renewable Energy Growth Program Cost Recovery
Summary of Costs by Year Through 2053

		Year 13 Y/E 3/31/2028 (m)	Year 14 Y/E 3/31/2029 (n)	Year 15 Y/E 3/31/2030 (o)	Year 16 Y/E 3/31/2031 (p)
(1) YEAR 1 BUILD	PBI Payments	\$7,019,877	\$7,019,877	\$7,019,877	\$7,019,877
(2) YEAR 1 BUILD	Market Value	\$1,744,272	\$1,744,272	\$1,744,272	\$1,744,272
(3) YEAR 1 BUILD	Net Cost	\$5,275,605	\$5,275,605	\$5,275,605	\$5,275,605
(4) YEAR 2 BUILD	PBI Payments	\$8,024,022	\$8,024,022	\$8,024,022	\$8,024,022
(5) YEAR 2 BUILD	Market Value	\$1,877,569	\$1,877,569	\$1,877,569	\$1,877,569
(6) YEAR 2 BUILD	Net Cost	\$6,146,453	\$6,146,453	\$6,146,453	\$6,146,453
(7) YEAR 3 BUILD	PBI Payments	\$9,277,978	\$9,277,978	\$9,277,978	\$9,277,978
(8) YEAR 3 BUILD	Market Value	\$801,146	\$801,146	\$801,146	\$801,146
(9) YEAR 3 BUILD	Net Cost	\$8,476,832	\$8,476,832	\$8,476,832	\$8,476,832
(10) YEAR 4 BUILD	PBI Payments	\$9,314,427	\$9,314,427	\$9,314,427	\$9,314,427
(11) YEAR 4 BUILD	Market Value	\$2,355,902	\$2,355,902	\$2,355,902	\$2,355,902
(12) YEAR 4 BUILD	Net Cost	\$6,958,525	\$6,958,525	\$6,958,525	\$6,958,525
(13) YEAR 5 BUILD	PBI Payments	\$16,604,320	\$16,604,320	\$16,604,320	\$16,604,320
(14) YEAR 5 BUILD	Market Value	\$3,711,280	\$3,711,280	\$3,711,280	\$3,711,280
(15) YEAR 5 BUILD	Net Cost	\$12,893,040	\$12,893,040	\$12,893,040	\$12,893,040
(16) YEAR 6 BUILD	PBI Payments	\$11,789,314	\$11,789,314	\$11,789,314	\$11,789,314
(17) YEAR 6 BUILD	Market Value	\$2,857,858	\$2,857,858	\$2,857,858	\$2,857,858
(18) YEAR 6 BUILD	Net Cost	\$8,931,457	\$8,931,457	\$8,931,457	\$8,931,457
(19) YEAR 7 BUILD	PBI Payments	\$11,558,963	\$11,558,963	\$11,558,963	\$11,558,963
(20) YEAR 7 BUILD	Market Value	\$2,961,987	\$2,961,987	\$2,961,987	\$2,961,987
(21) YEAR 7 BUILD	Net Cost	\$8,596,976	\$8,596,976	\$8,596,976	\$8,596,976
(22) YEAR 8 BUILD	PBI Payments	\$11,333,549	\$11,333,549	\$11,333,549	\$11,333,549
(23) YEAR 8 BUILD	Market Value	\$3,108,588	\$3,108,588	\$3,108,588	\$3,108,588
(24) YEAR 8 BUILD	Net Cost	\$8,224,961	\$8,224,961	\$8,224,961	\$8,224,961
(25) YEAR 9 BUILD	PBI Payments	\$11,114,850	\$11,114,850	\$11,114,850	\$11,114,850
(26) YEAR 9 BUILD	Market Value	\$3,267,013	\$3,267,013	\$3,267,013	\$3,267,013
(27) YEAR 9 BUILD	Net Cost	\$7,847,838	\$7,847,838	\$7,847,838	\$7,847,838
(28) YEAR 10 BUILD	PBI Payments	\$9,702,770	\$10,901,989	\$10,901,989	\$10,901,989
(29) YEAR 10 BUILD	Market Value	\$3,067,969	\$3,447,156	\$3,447,156	\$3,447,156
(30) YEAR 10 BUILD	Net Cost	\$6,634,801	\$7,454,833	\$7,454,833	\$7,454,833
(31) YEAR 11 BUILD	PBI Payments	\$7,603,394	\$9,517,610	\$10,693,943	\$10,693,943
(32) YEAR 11 BUILD	Market Value	\$2,594,452	\$3,247,626	\$3,649,018	\$3,649,018
(33) YEAR 11 BUILD	Net Cost	\$5,008,942	\$6,269,983	\$7,044,925	\$7,044,925
(34) YEAR 12 BUILD	PBI Payments	\$2,968,994	\$7,459,203	\$9,337,117	\$10,491,143
(35) YEAR 12 BUILD	Market Value	\$1,096,680	\$2,755,264	\$3,448,924	\$3,875,196
(36) YEAR 12 BUILD	Net Cost	\$1,872,313	\$4,703,938	\$5,888,193	\$6,615,947
(37) YEAR 13 BUILD	PBI Payments	\$555,863	\$2,913,131	\$7,318,857	\$9,161,438
(38) YEAR 13 BUILD	Market Value	\$222,940	\$1,168,372	\$2,935,379	\$3,674,385
(39) YEAR 13 BUILD	Net Cost	\$332,922	\$1,744,760	\$4,383,478	\$5,487,053
(40) YEAR 14 BUILD	PBI Payments	\$0	\$545,487	\$2,858,754	\$7,182,240
(41) YEAR 14 BUILD	Market Value	\$0	\$238,086	\$1,247,746	\$3,134,797
(42) YEAR 14 BUILD	Net Cost	\$0	\$307,401	\$1,611,008	\$4,047,444
(43) YEAR 15 BUILD	PBI Payments	\$0	\$0	\$535,341	\$2,805,582
(44) YEAR 15 BUILD	Market Value	\$0	\$0	\$254,991	\$1,336,340
(45) YEAR 15 BUILD	Net Cost	\$0	\$0	\$280,350	\$1,469,242
(46) TOTAL	PBI Payments	\$116,868,322	\$127,374,721	\$137,683,303	\$147,273,638
(47) TOTAL	Market Value	\$29,667,657	\$33,542,120	\$37,668,830	\$41,802,507
(48) TOTAL	Net Cost	\$87,200,665	\$93,832,602	\$100,014,473	\$105,471,131
(49) Admin/Metering Costs		\$1,609,239	\$1,528,777	\$1,452,338	\$1,379,721
(50) Estimated Remuneration		\$2,045,196	\$2,229,058	\$2,409,458	\$2,577,289
(51) Total Estimated RE Growth Program Expense		\$90,855,100	\$97,590,437	\$103,876,269	\$109,428,141

Column and Line Notes:

- Column (a): Actual Yr 1 costs per Docket 4626, Schedule NG-3, Page 1, Line (2)
- Column (b): Actual Yr 2 costs per Docket 4707 Schedule ASC-3, Page 3, Line (22)
- Column (c): Actual Yr 3 costs per Docket 4847 Schedule NG-3 Revised, Page 3, Line (25)
- Column (d): Projected costs per RIPUC Docket 4847 RE Growth Program Year 2019 Schedule NG-2 Revised, Page 1, Line (6) + Estimated Remuneration
- Lines (1) through (45) and (50) Estimates based on estimated build in each year pages 11 through 25
- Line (49) Columns (e) through (al): Projected costs per RIPUC Docket 4792, Attachment PUC 1-4, Line (8) - Line (1)
- Line (51) Line (48) + Line (49) + Line (50)
- Column (am): Sum of Columns (a) through (al)

Renewable Energy Growth Program Cost Recovery
Summary of Costs by Year Through 2053

		Year 17 Y/E 3/31/2032 (q)	Year 18 Y/E 3/31/2033 (r)	Year 19 Y/E 3/31/2034 (s)	Year 20 Y/E 3/31/2035 (t)
(1) YEAR 1 BUILD	PBI Payments	\$7,019,877	\$7,019,877	\$7,019,877	\$7,019,877
(2) YEAR 1 BUILD	Market Value	\$1,744,272	\$1,744,272	\$1,744,272	\$1,744,272
(3) YEAR 1 BUILD	Net Cost	\$5,275,605	\$5,275,605	\$5,275,605	\$5,275,605
(4) YEAR 2 BUILD	PBI Payments	\$8,024,022	\$8,024,022	\$8,024,022	\$8,024,022
(5) YEAR 2 BUILD	Market Value	\$1,877,569	\$1,877,569	\$1,877,569	\$1,877,569
(6) YEAR 2 BUILD	Net Cost	\$6,146,453	\$6,146,453	\$6,146,453	\$6,146,453
(7) YEAR 3 BUILD	PBI Payments	\$9,277,978	\$9,277,978	\$9,277,978	\$9,277,978
(8) YEAR 3 BUILD	Market Value	\$801,146	\$801,146	\$801,146	\$801,146
(9) YEAR 3 BUILD	Net Cost	\$8,476,832	\$8,476,832	\$8,476,832	\$8,476,832
(10) YEAR 4 BUILD	PBI Payments	\$9,314,427	\$9,314,427	\$9,314,427	\$9,314,427
(11) YEAR 4 BUILD	Market Value	\$2,355,902	\$2,355,902	\$2,355,902	\$2,355,902
(12) YEAR 4 BUILD	Net Cost	\$6,958,525	\$6,958,525	\$6,958,525	\$6,958,525
(13) YEAR 5 BUILD	PBI Payments	\$16,604,320	\$16,604,320	\$16,604,320	\$16,604,320
(14) YEAR 5 BUILD	Market Value	\$3,711,280	\$3,711,280	\$3,711,280	\$3,711,280
(15) YEAR 5 BUILD	Net Cost	\$12,893,040	\$12,893,040	\$12,893,040	\$12,893,040
(16) YEAR 6 BUILD	PBI Payments	\$11,789,314	\$11,789,314	\$11,789,314	\$11,789,314
(17) YEAR 6 BUILD	Market Value	\$2,857,858	\$2,857,858	\$2,857,858	\$2,857,858
(18) YEAR 6 BUILD	Net Cost	\$8,931,457	\$8,931,457	\$8,931,457	\$8,931,457
(19) YEAR 7 BUILD	PBI Payments	\$11,558,963	\$11,558,963	\$11,558,963	\$11,558,963
(20) YEAR 7 BUILD	Market Value	\$2,961,987	\$2,961,987	\$2,961,987	\$2,961,987
(21) YEAR 7 BUILD	Net Cost	\$8,596,976	\$8,596,976	\$8,596,976	\$8,596,976
(22) YEAR 8 BUILD	PBI Payments	\$11,333,549	\$11,333,549	\$11,333,549	\$11,333,549
(23) YEAR 8 BUILD	Market Value	\$3,108,588	\$3,108,588	\$3,108,588	\$3,108,588
(24) YEAR 8 BUILD	Net Cost	\$8,224,961	\$8,224,961	\$8,224,961	\$8,224,961
(25) YEAR 9 BUILD	PBI Payments	\$11,114,850	\$11,114,850	\$11,114,850	\$11,114,850
(26) YEAR 9 BUILD	Market Value	\$3,267,013	\$3,267,013	\$3,267,013	\$3,267,013
(27) YEAR 9 BUILD	Net Cost	\$7,847,838	\$7,847,838	\$7,847,838	\$7,847,838
(28) YEAR 10 BUILD	PBI Payments	\$10,901,989	\$10,901,989	\$10,901,989	\$10,901,989
(29) YEAR 10 BUILD	Market Value	\$3,447,156	\$3,447,156	\$3,447,156	\$3,447,156
(30) YEAR 10 BUILD	Net Cost	\$7,454,833	\$7,454,833	\$7,454,833	\$7,454,833
(31) YEAR 11 BUILD	PBI Payments	\$10,693,943	\$10,693,943	\$10,693,943	\$10,693,943
(32) YEAR 11 BUILD	Market Value	\$3,649,018	\$3,649,018	\$3,649,018	\$3,649,018
(33) YEAR 11 BUILD	Net Cost	\$7,044,925	\$7,044,925	\$7,044,925	\$7,044,925
(34) YEAR 12 BUILD	PBI Payments	\$10,491,143	\$10,491,143	\$10,491,143	\$10,491,143
(35) YEAR 12 BUILD	Market Value	\$3,875,196	\$3,875,196	\$3,875,196	\$3,875,196
(36) YEAR 12 BUILD	Net Cost	\$6,615,947	\$6,615,947	\$6,615,947	\$6,615,947
(37) YEAR 13 BUILD	PBI Payments	\$10,293,751	\$10,293,751	\$10,293,751	\$10,293,751
(38) YEAR 13 BUILD	Market Value	\$4,128,522	\$4,128,522	\$4,128,522	\$4,128,522
(39) YEAR 13 BUILD	Net Cost	\$6,165,229	\$6,165,229	\$6,165,229	\$6,165,229
(40) YEAR 14 BUILD	PBI Payments	\$8,990,427	\$10,101,604	\$10,101,604	\$10,101,604
(41) YEAR 14 BUILD	Market Value	\$3,924,007	\$4,408,997	\$4,408,997	\$4,408,997
(42) YEAR 14 BUILD	Net Cost	\$5,066,420	\$5,692,607	\$5,692,607	\$5,692,607
(43) YEAR 15 BUILD	PBI Payments	\$7,048,653	\$8,823,208	\$9,913,717	\$9,913,717
(44) YEAR 15 BUILD	Market Value	\$3,357,377	\$4,202,624	\$4,722,049	\$4,722,049
(45) YEAR 15 BUILD	Net Cost	\$3,691,276	\$4,620,584	\$5,191,668	\$5,191,668
(46) TOTAL	PBI Payments	\$154,457,208	\$157,342,940	\$158,433,449	\$158,433,449
(47) TOTAL	Market Value	\$45,066,892	\$46,397,128	\$46,916,554	\$46,916,554
(48) TOTAL	Net Cost	\$109,390,317	\$110,945,812	\$111,516,895	\$111,516,895
(49) Admin/Metering Costs		\$1,310,735	\$1,245,199	\$1,182,939	\$1,123,792
(50) Estimated Remuneration		\$2,703,001	\$2,753,501	\$2,772,585	\$2,772,585
(51) Total Estimated RE Growth Program Expense		\$113,404,053	\$114,944,512	\$115,472,419	\$115,413,272

Column and Line Notes:

- Column (a): Actual Yr 1 costs per Docket 4626, Schedule NG-3, Page 1, Line (2)
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- Lines (1) through (45) and (50) Estimates based on estimated build in each year pages 11 through 25
- Columns (e) through (al):
- Line (49) Columns (e) through (al): Projected costs per RIPUC Docket 4792, Attachment PUC 1-4, Line (8) - Line (1)
- Line (51) Line (48) + Line (49) + Line (50)
- Column (am): Sum of Columns (a) through (al)

Renewable Energy Growth Program Cost Recovery
Summary of Costs by Year Through 2053

		Year 21 Y/E 3/31/2036 (u)	Year 22 Y/E 3/31/2037 (v)	Year 23 Y/E 3/31/2038 (w)	Year 24 Y/E 3/31/2039 (x)
(1) YEAR 1 BUILD	PBI Payments	\$6,994,499	\$6,081,276	\$1,930,133	\$747,470
(2) YEAR 1 BUILD	Market Value	\$1,744,272	\$1,713,937	\$793,845	\$307,427
(3) YEAR 1 BUILD	Net Cost	\$5,250,227	\$4,367,340	\$1,136,289	\$440,043
(4) YEAR 2 BUILD	PBI Payments	\$8,024,022	\$7,612,410	\$4,775,930	\$2,333,457
(5) YEAR 2 BUILD	Market Value	\$1,877,569	\$1,877,569	\$1,721,548	\$841,126
(6) YEAR 2 BUILD	Net Cost	\$6,146,453	\$5,734,841	\$3,054,383	\$1,492,331
(7) YEAR 3 BUILD	PBI Payments	\$9,277,978	\$9,277,978	\$9,277,978	\$3,588,588
(8) YEAR 3 BUILD	Market Value	\$801,146	\$801,146	\$801,146	\$309,872
(9) YEAR 3 BUILD	Net Cost	\$8,476,832	\$8,476,832	\$8,476,832	\$3,278,716
(10) YEAR 4 BUILD	PBI Payments	\$9,314,427	\$9,314,427	\$9,314,427	\$9,265,302
(11) YEAR 4 BUILD	Market Value	\$2,355,902	\$2,355,902	\$2,355,902	\$2,343,477
(12) YEAR 4 BUILD	Net Cost	\$6,958,525	\$6,958,525	\$6,958,525	\$6,921,825
(13) YEAR 5 BUILD	PBI Payments	\$16,604,320	\$16,604,320	\$16,604,320	\$16,604,320
(14) YEAR 5 BUILD	Market Value	\$3,711,280	\$3,711,280	\$3,711,280	\$3,711,280
(15) YEAR 5 BUILD	Net Cost	\$12,893,040	\$12,893,040	\$12,893,040	\$12,893,040
(16) YEAR 6 BUILD	PBI Payments	\$11,789,314	\$11,789,314	\$11,789,314	\$11,789,314
(17) YEAR 6 BUILD	Market Value	\$2,857,858	\$2,857,858	\$2,857,858	\$2,857,858
(18) YEAR 6 BUILD	Net Cost	\$8,931,457	\$8,931,457	\$8,931,457	\$8,931,457
(19) YEAR 7 BUILD	PBI Payments	\$11,558,963	\$11,558,963	\$11,558,963	\$11,558,963
(20) YEAR 7 BUILD	Market Value	\$2,961,987	\$2,961,987	\$2,961,987	\$2,961,987
(21) YEAR 7 BUILD	Net Cost	\$8,596,976	\$8,596,976	\$8,596,976	\$8,596,976
(22) YEAR 8 BUILD	PBI Payments	\$11,333,549	\$11,333,549	\$11,333,549	\$11,333,549
(23) YEAR 8 BUILD	Market Value	\$3,108,588	\$3,108,588	\$3,108,588	\$3,108,588
(24) YEAR 8 BUILD	Net Cost	\$8,224,961	\$8,224,961	\$8,224,961	\$8,224,961
(25) YEAR 9 BUILD	PBI Payments	\$11,114,850	\$11,114,850	\$11,114,850	\$11,114,850
(26) YEAR 9 BUILD	Market Value	\$3,267,013	\$3,267,013	\$3,267,013	\$3,267,013
(27) YEAR 9 BUILD	Net Cost	\$7,847,838	\$7,847,838	\$7,847,838	\$7,847,838
(28) YEAR 10 BUILD	PBI Payments	\$10,901,989	\$10,901,989	\$10,901,989	\$10,901,989
(29) YEAR 10 BUILD	Market Value	\$3,447,156	\$3,447,156	\$3,447,156	\$3,447,156
(30) YEAR 10 BUILD	Net Cost	\$7,454,833	\$7,454,833	\$7,454,833	\$7,454,833
(31) YEAR 11 BUILD	PBI Payments	\$10,693,943	\$10,693,943	\$10,693,943	\$10,693,943
(32) YEAR 11 BUILD	Market Value	\$3,649,018	\$3,649,018	\$3,649,018	\$3,649,018
(33) YEAR 11 BUILD	Net Cost	\$7,044,925	\$7,044,925	\$7,044,925	\$7,044,925
(34) YEAR 12 BUILD	PBI Payments	\$10,491,143	\$10,491,143	\$10,491,143	\$10,491,143
(35) YEAR 12 BUILD	Market Value	\$3,875,196	\$3,875,196	\$3,875,196	\$3,875,196
(36) YEAR 12 BUILD	Net Cost	\$6,615,947	\$6,615,947	\$6,615,947	\$6,615,947
(37) YEAR 13 BUILD	PBI Payments	\$10,293,751	\$10,293,751	\$10,293,751	\$10,293,751
(38) YEAR 13 BUILD	Market Value	\$4,128,522	\$4,128,522	\$4,128,522	\$4,128,522
(39) YEAR 13 BUILD	Net Cost	\$6,165,229	\$6,165,229	\$6,165,229	\$6,165,229
(40) YEAR 14 BUILD	PBI Payments	\$10,101,604	\$10,101,604	\$10,101,604	\$10,101,604
(41) YEAR 14 BUILD	Market Value	\$4,408,997	\$4,408,997	\$4,408,997	\$4,408,997
(42) YEAR 14 BUILD	Net Cost	\$5,692,607	\$5,692,607	\$5,692,607	\$5,692,607
(43) YEAR 15 BUILD	PBI Payments	\$9,913,717	\$9,913,717	\$9,913,717	\$9,913,717
(44) YEAR 15 BUILD	Market Value	\$4,722,049	\$4,722,049	\$4,722,049	\$4,722,049
(45) YEAR 15 BUILD	Net Cost	\$5,191,668	\$5,191,668	\$5,191,668	\$5,191,668
(46) TOTAL	PBI Payments	\$158,408,071	\$157,083,236	\$150,095,613	\$140,731,961
(47) TOTAL	Market Value	\$46,916,554	\$46,886,218	\$45,810,104	\$43,939,565
(48) TOTAL	Net Cost	\$111,491,517	\$110,197,018	\$104,285,508	\$96,792,396
(49) Admin/Metering Costs		\$1,067,602	\$1,014,222	\$963,511	\$915,335
(50) Estimated Remuneration		\$2,772,141	\$2,748,957	\$2,626,673	\$2,462,809
(51) Total Estimated RE Growth Program Expense		\$115,331,261	\$113,960,196	\$107,875,692	\$100,170,541

Column and Line Notes:

- Column (a): Actual Yr 1 costs per Docket 4626, Schedule NG-3, Page 1, Line (2)
- Column (b): Actual Yr 2 costs per Docket 4707 Schedule ASC-3, Page 3, Line (22)
- Column (c): Actual Yr 3 costs per Docket 4847 Schedule NG-3 Revised, Page 3, Line (25)
- Column (d): Projected costs per RIPUC Docket 4847 RE Growth Program Year 2019 Schedule NG-2 Revised, Page 1, Line (6) + Estimated Remuneration
- Lines (1) through (45) and (50) Estimates based on estimated build in each year pages 11 through 25
- Columns (e) through (al):
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- Line (51) Line (48) + Line (49) + Line (50)
- Column (am): Sum of Columns (a) through (al)

Renewable Energy Growth Program Cost Recovery
Summary of Costs by Year Through 2053

		Year 25 Y/E 3/31/2040 (y)	Year 26 Y/E 3/31/2041 (z)	Year 27 Y/E 3/31/2042 (aa)	Year 28 Y/E 3/31/2043 (ab)
(1) YEAR 1 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(2) YEAR 1 BUILD	Market Value	\$0	\$0	\$0	\$0
(3) YEAR 1 BUILD	Net Cost	\$0	\$0	\$0	\$0
(4) YEAR 2 BUILD	PBI Payments	\$882,642	\$0	\$0	\$0
(5) YEAR 2 BUILD	Market Value	\$318,160	\$0	\$0	\$0
(6) YEAR 2 BUILD	Net Cost	\$564,482	\$0	\$0	\$0
(7) YEAR 3 BUILD	PBI Payments	\$2,699,892	\$1,020,578	\$0	\$0
(8) YEAR 3 BUILD	Market Value	\$233,134	\$88,126	\$0	\$0
(9) YEAR 3 BUILD	Net Cost	\$2,466,758	\$932,451	\$0	\$0
(10) YEAR 4 BUILD	PBI Payments	\$7,786,147	\$2,794,328	\$1,024,587	\$0
(11) YEAR 4 BUILD	Market Value	\$1,969,354	\$706,771	\$259,149	\$0
(12) YEAR 4 BUILD	Net Cost	\$5,816,794	\$2,087,558	\$765,438	\$0
(13) YEAR 5 BUILD	PBI Payments	\$15,707,687	\$11,905,297	\$7,465,439	\$1,826,475
(14) YEAR 5 BUILD	Market Value	\$3,510,871	\$2,660,987	\$1,668,622	\$408,241
(15) YEAR 5 BUILD	Net Cost	\$12,196,816	\$9,244,310	\$5,796,817	\$1,418,234
(16) YEAR 6 BUILD	PBI Payments	\$11,789,314	\$11,152,691	\$8,452,938	\$3,407,112
(17) YEAR 6 BUILD	Market Value	\$2,857,858	\$2,703,533	\$2,049,084	\$825,921
(18) YEAR 6 BUILD	Net Cost	\$8,931,457	\$8,449,158	\$6,403,854	\$2,581,191
(19) YEAR 7 BUILD	PBI Payments	\$11,558,963	\$11,558,963	\$10,934,779	\$8,287,777
(20) YEAR 7 BUILD	Market Value	\$2,961,987	\$2,961,987	\$2,802,040	\$2,123,745
(21) YEAR 7 BUILD	Net Cost	\$8,596,976	\$8,596,976	\$8,132,739	\$6,164,032
(22) YEAR 8 BUILD	PBI Payments	\$11,333,549	\$11,333,549	\$11,333,549	\$10,721,538
(23) YEAR 8 BUILD	Market Value	\$3,108,588	\$3,108,588	\$3,108,588	\$2,940,724
(24) YEAR 8 BUILD	Net Cost	\$8,224,961	\$8,224,961	\$8,224,961	\$7,780,813
(25) YEAR 9 BUILD	PBI Payments	\$11,114,850	\$11,114,850	\$11,114,850	\$11,114,850
(26) YEAR 9 BUILD	Market Value	\$3,267,013	\$3,267,013	\$3,267,013	\$3,267,013
(27) YEAR 9 BUILD	Net Cost	\$7,847,838	\$7,847,838	\$7,847,838	\$7,847,838
(28) YEAR 10 BUILD	PBI Payments	\$10,901,989	\$10,901,989	\$10,901,989	\$10,901,989
(29) YEAR 10 BUILD	Market Value	\$3,447,156	\$3,447,156	\$3,447,156	\$3,447,156
(30) YEAR 10 BUILD	Net Cost	\$7,454,833	\$7,454,833	\$7,454,833	\$7,454,833
(31) YEAR 11 BUILD	PBI Payments	\$10,693,943	\$10,693,943	\$10,693,943	\$10,693,943
(32) YEAR 11 BUILD	Market Value	\$3,649,018	\$3,649,018	\$3,649,018	\$3,649,018
(33) YEAR 11 BUILD	Net Cost	\$7,044,925	\$7,044,925	\$7,044,925	\$7,044,925
(34) YEAR 12 BUILD	PBI Payments	\$10,491,143	\$10,491,143	\$10,491,143	\$10,491,143
(35) YEAR 12 BUILD	Market Value	\$3,875,196	\$3,875,196	\$3,875,196	\$3,875,196
(36) YEAR 12 BUILD	Net Cost	\$6,615,947	\$6,615,947	\$6,615,947	\$6,615,947
(37) YEAR 13 BUILD	PBI Payments	\$10,293,751	\$10,293,751	\$10,293,751	\$10,293,751
(38) YEAR 13 BUILD	Market Value	\$4,128,522	\$4,128,522	\$4,128,522	\$4,128,522
(39) YEAR 13 BUILD	Net Cost	\$6,165,229	\$6,165,229	\$6,165,229	\$6,165,229
(40) YEAR 14 BUILD	PBI Payments	\$10,101,604	\$10,101,604	\$10,101,604	\$10,101,604
(41) YEAR 14 BUILD	Market Value	\$4,408,997	\$4,408,997	\$4,408,997	\$4,408,997
(42) YEAR 14 BUILD	Net Cost	\$5,692,607	\$5,692,607	\$5,692,607	\$5,692,607
(43) YEAR 15 BUILD	PBI Payments	\$9,913,717	\$9,913,717	\$9,913,717	\$9,913,717
(44) YEAR 15 BUILD	Market Value	\$4,722,049	\$4,722,049	\$4,722,049	\$4,722,049
(45) YEAR 15 BUILD	Net Cost	\$5,191,668	\$5,191,668	\$5,191,668	\$5,191,668
(46) TOTAL	PBI Payments	\$135,269,192	\$123,276,404	\$112,722,290	\$97,753,899
(47) TOTAL	Market Value	\$42,457,902	\$39,727,944	\$37,385,434	\$33,796,582
(48) TOTAL	Net Cost	\$92,811,290	\$83,548,460	\$75,336,856	\$63,957,317
(49) Admin/Metering Costs		\$869,569	\$826,090	\$784,786	\$745,546
(50) Estimated Remuneration		\$2,367,211	\$2,157,337	\$1,972,640	\$1,710,693
(51) Total Estimated RE Growth Program Expense		\$96,048,070	\$86,531,887	\$78,094,282	\$66,413,556

Column and Line Notes:

- Column (a): Actual Yr 1 costs per Docket 4626, Schedule NG-3, Page 1, Line (2)
- Column (b): Actual Yr 2 costs per Docket 4707 Schedule ASC-3, Page 3, Line (22)
- Column (c): Actual Yr 3 costs per Docket 4847 Schedule NG-3 Revised, Page 3, Line (25)
- Column (d): Projected costs per RIPUC Docket 4847 RE Growth Program Year 2019 Schedule NG-2 Revised, Page 1, Line (6) + Estimated Remuneration
- Lines (1) through (45) and (50) Estimates based on estimated build in each year pages 11 through 25
- Columns (e) through (al):
- Line (49) Columns (e) through (al): Projected costs per RIPUC Docket 4792, Attachment PUC 1-4, Line (8) - Line (1)
- Line (51) Line (48) + Line (49) + Line (50)
- Column (am): Sum of Columns (a) through (al)

Renewable Energy Growth Program Cost Recovery
Summary of Costs by Year Through 2053

		Year 29 Y/E 3/31/2044 (ac)	Year 30 Y/E 3/31/2045 (ad)	Year 31 Y/E 3/31/2046 (ae)	Year 32 Y/E 3/31/2047 (af)
(1) YEAR 1 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(2) YEAR 1 BUILD	Market Value	\$0	\$0	\$0	\$0
(3) YEAR 1 BUILD	Net Cost	\$0	\$0	\$0	\$0
(4) YEAR 2 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(5) YEAR 2 BUILD	Market Value	\$0	\$0	\$0	\$0
(6) YEAR 2 BUILD	Net Cost	\$0	\$0	\$0	\$0
(7) YEAR 3 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(8) YEAR 3 BUILD	Market Value	\$0	\$0	\$0	\$0
(9) YEAR 3 BUILD	Net Cost	\$0	\$0	\$0	\$0
(10) YEAR 4 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(11) YEAR 4 BUILD	Market Value	\$0	\$0	\$0	\$0
(12) YEAR 4 BUILD	Net Cost	\$0	\$0	\$0	\$0
(13) YEAR 5 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(14) YEAR 5 BUILD	Market Value	\$0	\$0	\$0	\$0
(15) YEAR 5 BUILD	Net Cost	\$0	\$0	\$0	\$0
(16) YEAR 6 BUILD	PBI Payments	\$1,296,825	\$0	\$0	\$0
(17) YEAR 6 BUILD	Market Value	\$314,364	\$0	\$0	\$0
(18) YEAR 6 BUILD	Net Cost	\$982,460	\$0	\$0	\$0
(19) YEAR 7 BUILD	PBI Payments	\$3,340,540	\$1,271,486	\$0	\$0
(20) YEAR 7 BUILD	Market Value	\$856,014	\$325,819	\$0	\$0
(21) YEAR 7 BUILD	Net Cost	\$2,484,526	\$945,667	\$0	\$0
(22) YEAR 8 BUILD	PBI Payments	\$8,126,155	\$3,275,396	\$1,246,690	\$0
(23) YEAR 8 BUILD	Market Value	\$2,228,858	\$898,382	\$341,945	\$0
(24) YEAR 8 BUILD	Net Cost	\$5,897,297	\$2,377,014	\$904,746	\$0
(25) YEAR 9 BUILD	PBI Payments	\$10,514,648	\$7,969,348	\$3,212,192	\$1,222,634
(26) YEAR 9 BUILD	Market Value	\$3,090,594	\$2,342,448	\$944,167	\$359,371
(27) YEAR 9 BUILD	Net Cost	\$7,424,054	\$5,626,900	\$2,268,025	\$863,262
(28) YEAR 10 BUILD	PBI Payments	\$10,901,989	\$10,313,282	\$7,816,726	\$3,150,675
(29) YEAR 10 BUILD	Market Value	\$3,447,156	\$3,261,010	\$2,471,611	\$996,228
(30) YEAR 10 BUILD	Net Cost	\$7,454,833	\$7,052,272	\$5,345,115	\$2,154,447
(31) YEAR 11 BUILD	PBI Payments	\$10,693,943	\$10,693,943	\$10,116,470	\$7,667,557
(32) YEAR 11 BUILD	Market Value	\$3,649,018	\$3,649,018	\$3,451,971	\$2,616,346
(33) YEAR 11 BUILD	Net Cost	\$7,044,925	\$7,044,925	\$6,664,499	\$5,051,211
(34) YEAR 12 BUILD	PBI Payments	\$10,491,143	\$10,491,143	\$10,491,143	\$9,924,621
(35) YEAR 12 BUILD	Market Value	\$3,875,196	\$3,875,196	\$3,875,196	\$3,665,935
(36) YEAR 12 BUILD	Net Cost	\$6,615,947	\$6,615,947	\$6,615,947	\$6,258,686
(37) YEAR 13 BUILD	PBI Payments	\$10,293,751	\$10,293,751	\$10,293,751	\$10,293,751
(38) YEAR 13 BUILD	Market Value	\$4,128,522	\$4,128,522	\$4,128,522	\$4,128,522
(39) YEAR 13 BUILD	Net Cost	\$6,165,229	\$6,165,229	\$6,165,229	\$6,165,229
(40) YEAR 14 BUILD	PBI Payments	\$10,101,604	\$10,101,604	\$10,101,604	\$10,101,604
(41) YEAR 14 BUILD	Market Value	\$4,408,997	\$4,408,997	\$4,408,997	\$4,408,997
(42) YEAR 14 BUILD	Net Cost	\$5,692,607	\$5,692,607	\$5,692,607	\$5,692,607
(43) YEAR 15 BUILD	PBI Payments	\$9,913,717	\$9,913,717	\$9,913,717	\$9,913,717
(44) YEAR 15 BUILD	Market Value	\$4,722,049	\$4,722,049	\$4,722,049	\$4,722,049
(45) YEAR 15 BUILD	Net Cost	\$5,191,668	\$5,191,668	\$5,191,668	\$5,191,668
(46) TOTAL	PBI Payments	\$85,674,315	\$74,323,669	\$63,192,293	\$52,274,559
(47) TOTAL	Market Value	\$30,720,769	\$27,611,441	\$24,344,458	\$20,897,449
(48) TOTAL	Net Cost	\$54,953,546	\$46,712,228	\$38,847,836	\$31,377,110
(49) Admin/Metering Costs		\$708,269	\$672,856	\$639,213	\$607,252
(50) Estimated Remuneration		\$1,499,301	\$1,300,664	\$1,105,865	\$914,805
(51) Total Estimated RE Growth Program Expense		\$57,161,116	\$48,685,748	\$40,592,914	\$32,899,167

Column and Line Notes:

- Column (a): Actual Yr 1 costs per Docket 4626, Schedule NG-3, Page 1, Line (2)
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- Column (am): Sum of Columns (a) through (al)

Renewable Energy Growth Program Cost Recovery
Summary of Costs by Year Through 2053

		Year 33 Y/E 3/31/2048 (ag)	Year 34 Y/E 3/31/2049 (ah)	Year 35 Y/E 3/31/2050 (ai)	Year 36 Y/E 3/31/2051 (aj)
(1) YEAR 1 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(2) YEAR 1 BUILD	Market Value	\$0	\$0	\$0	\$0
(3) YEAR 1 BUILD	Net Cost	\$0	\$0	\$0	\$0
(4) YEAR 2 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(5) YEAR 2 BUILD	Market Value	\$0	\$0	\$0	\$0
(6) YEAR 2 BUILD	Net Cost	\$0	\$0	\$0	\$0
(7) YEAR 3 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(8) YEAR 3 BUILD	Market Value	\$0	\$0	\$0	\$0
(9) YEAR 3 BUILD	Net Cost	\$0	\$0	\$0	\$0
(10) YEAR 4 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(11) YEAR 4 BUILD	Market Value	\$0	\$0	\$0	\$0
(12) YEAR 4 BUILD	Net Cost	\$0	\$0	\$0	\$0
(13) YEAR 5 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(14) YEAR 5 BUILD	Market Value	\$0	\$0	\$0	\$0
(15) YEAR 5 BUILD	Net Cost	\$0	\$0	\$0	\$0
(16) YEAR 6 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(17) YEAR 6 BUILD	Market Value	\$0	\$0	\$0	\$0
(18) YEAR 6 BUILD	Net Cost	\$0	\$0	\$0	\$0
(19) YEAR 7 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(20) YEAR 7 BUILD	Market Value	\$0	\$0	\$0	\$0
(21) YEAR 7 BUILD	Net Cost	\$0	\$0	\$0	\$0
(22) YEAR 8 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(23) YEAR 8 BUILD	Market Value	\$0	\$0	\$0	\$0
(24) YEAR 8 BUILD	Net Cost	\$0	\$0	\$0	\$0
(25) YEAR 9 BUILD	PBI Payments	\$0	\$0	\$0	\$0
(26) YEAR 9 BUILD	Market Value	\$0	\$0	\$0	\$0
(27) YEAR 9 BUILD	Net Cost	\$0	\$0	\$0	\$0
(28) YEAR 10 BUILD	PBI Payments	\$1,199,219	\$0	\$0	\$0
(29) YEAR 10 BUILD	Market Value	\$379,187	\$0	\$0	\$0
(30) YEAR 10 BUILD	Net Cost	\$820,032	\$0	\$0	\$0
(31) YEAR 11 BUILD	PBI Payments	\$3,090,550	\$1,176,334	\$0	\$0
(32) YEAR 11 BUILD	Market Value	\$1,054,566	\$401,392	\$0	\$0
(33) YEAR 11 BUILD	Net Cost	\$2,035,983	\$774,942	\$0	\$0
(34) YEAR 12 BUILD	PBI Payments	\$7,522,150	\$3,031,940	\$1,154,026	\$0
(35) YEAR 12 BUILD	Market Value	\$2,778,516	\$1,119,932	\$426,272	\$0
(36) YEAR 12 BUILD	Net Cost	\$4,743,634	\$1,912,009	\$727,754	\$0
(37) YEAR 13 BUILD	PBI Payments	\$9,737,888	\$7,380,619	\$2,974,894	\$1,132,313
(38) YEAR 13 BUILD	Market Value	\$3,905,582	\$2,960,150	\$1,193,143	\$454,137
(39) YEAR 13 BUILD	Net Cost	\$5,832,306	\$4,420,469	\$1,781,751	\$678,175
(40) YEAR 14 BUILD	PBI Payments	\$10,101,604	\$9,556,117	\$7,242,850	\$2,919,363
(41) YEAR 14 BUILD	Market Value	\$4,408,997	\$4,170,911	\$3,161,251	\$1,274,200
(42) YEAR 14 BUILD	Net Cost	\$5,692,607	\$5,385,206	\$4,081,599	\$1,645,163
(43) YEAR 15 BUILD	PBI Payments	\$9,913,717	\$9,913,717	\$9,378,376	\$7,108,135
(44) YEAR 15 BUILD	Market Value	\$4,722,049	\$4,722,049	\$4,467,059	\$3,385,709
(45) YEAR 15 BUILD	Net Cost	\$5,191,668	\$5,191,668	\$4,911,318	\$3,722,426
(46) TOTAL	PBI Payments	\$41,565,127	\$31,058,727	\$20,750,146	\$11,159,811
(47) TOTAL	Market Value	\$17,248,897	\$13,374,434	\$9,247,724	\$5,114,047
(48) TOTAL	Net Cost	\$24,316,230	\$17,684,293	\$11,502,422	\$6,045,764
(49) Admin/Metering Costs		\$576,890	\$548,045	\$520,643	\$494,611
(50) Estimated Remuneration		\$727,390	\$543,528	\$363,128	\$195,297
(51) Total Estimated RE Growth Program Expense		\$25,620,509	\$18,775,866	\$12,386,193	\$6,735,672

Column and Line Notes:

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- Column (am): Sum of Columns (a) through (al)

Renewable Energy Growth Program Cost Recovery
Summary of Costs by Year Through 2053

		Year 37 Y/E 3/31/2052 (ak)	Year 38 Y/E 3/31/2053 (al)	Cumulative Cost (am)
(1) YEAR 1 BUILD	PBI Payments	\$0	\$0	\$140,397,548
(2) YEAR 1 BUILD	Market Value	\$0	\$0	\$35,105,654
(3) YEAR 1 BUILD	Net Cost	\$0	\$0	\$105,291,894
(4) YEAR 2 BUILD	PBI Payments	\$0	\$0	\$160,480,447
(5) YEAR 2 BUILD	Market Value	\$0	\$0	\$38,377,068
(6) YEAR 2 BUILD	Net Cost	\$0	\$0	\$122,103,378
(7) YEAR 3 BUILD	PBI Payments	\$0	\$0	\$185,559,556
(8) YEAR 3 BUILD	Market Value	\$0	\$0	\$19,992,847
(9) YEAR 3 BUILD	Net Cost	\$0	\$0	\$165,566,710
(10) YEAR 4 BUILD	PBI Payments	\$0	\$0	\$186,288,543
(11) YEAR 4 BUILD	Market Value	\$0	\$0	\$46,787,543
(12) YEAR 4 BUILD	Net Cost	\$0	\$0	\$139,501,000
(13) YEAR 5 BUILD	PBI Payments	\$0	\$0	\$332,086,397
(14) YEAR 5 BUILD	Market Value	\$0	\$0	\$74,091,104
(15) YEAR 5 BUILD	Net Cost	\$0	\$0	\$257,995,293
(16) YEAR 6 BUILD	PBI Payments	\$0	\$0	\$235,786,287
(17) YEAR 6 BUILD	Market Value	\$0	\$0	\$57,157,155
(18) YEAR 6 BUILD	Net Cost	\$0	\$0	\$178,629,132
(19) YEAR 7 BUILD	PBI Payments	\$0	\$0	\$231,179,262
(20) YEAR 7 BUILD	Market Value	\$0	\$0	\$59,239,744
(21) YEAR 7 BUILD	Net Cost	\$0	\$0	\$171,939,518
(22) YEAR 8 BUILD	PBI Payments	\$0	\$0	\$226,670,988
(23) YEAR 8 BUILD	Market Value	\$0	\$0	\$62,171,764
(24) YEAR 8 BUILD	Net Cost	\$0	\$0	\$164,499,224
(25) YEAR 9 BUILD	PBI Payments	\$0	\$0	\$222,297,008
(26) YEAR 9 BUILD	Market Value	\$0	\$0	\$65,340,257
(27) YEAR 9 BUILD	Net Cost	\$0	\$0	\$156,956,751
(28) YEAR 10 BUILD	PBI Payments	\$0	\$0	\$218,039,783
(29) YEAR 10 BUILD	Market Value	\$0	\$0	\$68,943,124
(30) YEAR 10 BUILD	Net Cost	\$0	\$0	\$149,096,659
(31) YEAR 11 BUILD	PBI Payments	\$0	\$0	\$213,878,869
(32) YEAR 11 BUILD	Market Value	\$0	\$0	\$72,980,365
(33) YEAR 11 BUILD	Net Cost	\$0	\$0	\$140,898,504
(34) YEAR 12 BUILD	PBI Payments	\$0	\$0	\$209,822,863
(35) YEAR 12 BUILD	Market Value	\$0	\$0	\$77,503,920
(36) YEAR 12 BUILD	Net Cost	\$0	\$0	\$132,318,943
(37) YEAR 13 BUILD	PBI Payments	\$0	\$0	\$205,875,015
(38) YEAR 13 BUILD	Market Value	\$0	\$0	\$82,570,443
(39) YEAR 13 BUILD	Net Cost	\$0	\$0	\$123,304,572
(40) YEAR 14 BUILD	PBI Payments	\$1,111,176	\$0	\$202,032,075
(41) YEAR 14 BUILD	Market Value	\$484,990	\$0	\$88,179,933
(42) YEAR 14 BUILD	Net Cost	\$626,187	\$0	\$113,852,143
(43) YEAR 15 BUILD	PBI Payments	\$2,865,064	\$1,090,509	\$198,274,336
(44) YEAR 15 BUILD	Market Value	\$1,364,672	\$519,425	\$94,440,984
(45) YEAR 15 BUILD	Net Cost	\$1,500,392	\$571,083	\$103,833,352
(46) TOTAL	PBI Payments	\$3,976,241	\$1,090,509	\$3,168,668,977
(47) TOTAL	Market Value	\$1,849,662	\$519,425	\$942,881,904
(48) TOTAL	Net Cost	\$2,126,579	\$571,083	\$2,225,787,073
(49) Admin/Metering Costs		\$469,880	\$446,386	\$42,145,035
(50) Estimated Remuneration		\$69,584	\$19,084	\$55,451,707
(51) Total Estimated RE Growth Program Expense		\$2,666,043	\$1,036,553	\$2,323,383,816

Column and Line Notes:

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- Line (51) Line (48) + Line (49) + Line (50)
- Column (am): Sum of Columns (a) through (al)

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Initial Program Year through March 31, 2016**

Section 1: Estimated Annual Performance-Based Incentive Payments

	<u>Unit</u>	<u>Unit Capacity (kW)</u>	<u>Unit Availability Factor</u>	<u>Estimated Program Year Output (kWh)</u>	<u>Tariff Price (\$ per kWh)</u>	<u>Estimated Program Year Cost</u>
(1)	Small Scale Solar - 15 Yr Tariff	2,592.0	14%	3,178,866	\$0.41	\$1,314,461
(2)	Small Scale Solar - 20 Yr Tariff	371.3	14%	455,362	\$0.38	\$171,899
(3)	Small Scale Solar II	17.4	14%	21,339	\$0.30	\$6,359
(4)	Medium Solar	2,183.0	14%	2,677,231	\$0.24	\$653,244
(5)	Commercial Solar	4,147.0	14%	5,085,881	\$0.19	\$963,173
(6)	Large Solar	6,644.0	14%	8,148,202	\$0.16	\$1,314,802
(7)	Wind	6,000.0	22%	11,563,200	\$0.22	\$2,595,938
(8)	Hydro	0.0	40%	0	\$0.18	\$0
(9)	Anaerobic Digestion	0.0	74%	0	\$0.21	\$0
(10)	Total	21,954.7		31,130,081		\$7,019,877

Section 2: Estimated Market Value

<u>Class</u>	<u>Estimated kWh Purchased Under Tariffs (f)</u>	<u>Market Energy Proxy (g)</u>	<u>Energy Market Value (h)</u>	<u>REC Proxy (i)</u>	<u>REC Market Value (j)</u>	<u>Total Market Value (k)</u>
(11)	Small Scale Solar - 15 Yr Tariff	3,178,866	n/a	n/a	\$0.0168	\$53,537
(12)	Small Scale Solar - 20 Yr Tariff	455,362	n/a	n/a	\$0.0168	\$7,669
(13)	Small Scale Solar II	21,339	n/a	n/a	\$0.0168	\$359
(14)	Medium Solar	2,677,231	\$0.042	\$111,679	\$0.0168	\$45,088
(15)	Commercial Solar	5,085,881	\$0.042	\$212,155	\$0.0168	\$85,654
(16)	Large Solar	8,148,202	\$0.042	\$339,898	\$0.0168	\$137,228
(17)	Wind	11,563,200	\$0.047	\$539,712	\$0.0183	\$211,293
(18)	Hydro	0	\$0.045	\$0	\$0.0178	\$0
(19)	Anaerobic Digestion	0	\$0.043	\$0	\$0.0178	\$0
(20)	Total			\$1,203,444		\$540,828
						\$1,744,272

Section 3: Estimated Net Cost

	<u>Estimated Net Cost (l)</u>
(21)	Small Scale Solar - 15 Yr Tariff
(22)	Small Scale Solar - 20 Yr Tariff
(23)	Small Scale Solar II
(24)	Medium Solar
(25)	Commercial Solar
(26)	Large Solar
(27)	Wind
(28)	Hydro
(29)	Anaerobic Digestion
(30)	Total Estimated Above (Below) Market Cost

Column Descriptions:

- | | |
|--|--|
| (a) estimated | (h) column (f) x column (g) |
| (b) estimated | (i) REC price estimate based on market information as of 1/23/19 |
| (c) column (a) x column (b) x 8,760 hours | (j) column (f) x column (i) |
| (d) average of tariffs | (k) column (h) + column (j) |
| (e) column (c) x column (d) | (l) column (e) - column (k) |
| (f) per column (c) | |
| (g) Market Energy price estimate based on most recent market information | |

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Second Program Year through March 31, 2017**

Section 1: Estimated Annual Performance-Based Incentive Payments

<u>Unit</u>	<u>Unit Capacity (kW)</u> (a)	<u>Unit Availability Factor</u> (b)	<u>Estimated Program Year Output (kWh)</u> (c)	<u>Tariff Price (\$ per kWh)</u> (d)	<u>Estimated Program Year Cost</u> (e)
(1) Small Scale Solar - 15 Yr Tariff	5,526.5	14%	6,777,700	\$0.38	\$2,553,880
(2) Small Scale Solar - 20 Yr Tariff	1,293.8	14%	1,586,729	\$0.33	\$530,761
(3) Small Scale Solar II (1)	56.9	14%	69,782	\$0.25	\$17,376
(4) Medium Solar	4,495.0	14%	5,512,668	\$0.23	\$1,243,107
(5) Commercial Solar	6,929.0	14%	8,248,864	\$0.18	\$1,461,699
(6) Large Solar	7,854.0	14%	9,755,987	\$0.12	\$1,182,426
(7) Wind	3,000.0	21%	5,518,800	\$0.19	\$1,034,775
(8) Hydro	0.0	40%	0	\$0.00	\$0
(9) Anaerobic Digestion	0.0	74%	0	\$0.00	\$0
(10) Total	29,155.2		37,470,529		\$8,024,022

Section 2: Estimated Market Value

<u>Class</u>	<u>Estimated kWh Purchased Under Tariffs</u> (f)	<u>Market Energy Proxy</u> (g)	<u>Energy Market Value</u> (h)	<u>REC Proxy</u> (i)	<u>REC Market Value</u> (j)	<u>Total Market Value</u> (k)
(11) Small Scale Solar - 15 Yr Tariff	6,777,700	n/a	n/a	\$0.0168	\$114,146	\$114,146
(12) Small Scale Solar - 20 Yr Tariff	1,586,729	n/a	n/a	\$0.0168	\$26,723	\$26,723
(13) Small Scale Solar II (1)	69,782	n/a	n/a	\$0.0168	\$1,175	\$1,175
(14) Medium Solar	5,512,668	\$0.042	\$229,958	\$0.0168	\$92,841	\$322,800
(15) Commercial Solar	8,248,864	\$0.042	\$344,097	\$0.0168	\$138,923	\$483,020
(16) Large Solar	9,755,987	\$0.042	\$406,966	\$0.0168	\$164,305	\$571,271
(17) Wind	5,518,800	\$0.047	\$257,590	\$0.0183	\$100,844	\$358,434
(18) Hydro	0	\$0.045	\$0	\$0.0178	\$0	\$0
(19) Anaerobic Digestion	0	\$0.043	\$0	\$0.0178	\$0	\$0
(20) Total			\$1,238,611		\$638,958	\$1,877,569

Section 3: Estimated Net Cost

	<u>Estimated Net Cost</u> (l)
(21) Small Scale Solar - 15 Yr Tariff	\$2,439,734
(22) Small Scale Solar - 20 Yr Tariff	\$504,038
(23) Small Scale Solar II (1)	\$16,201
(24) Medium Solar	\$920,307
(25) Commercial Solar	\$978,679
(26) Large Solar	\$611,154
(27) Wind	\$676,341
(28) Hydro	\$0
(29) Anaerobic Digestion	\$0
(30) Total Estimated Above (Below) Market Cost	\$6,146,453

Column Descriptions:

- | | |
|--|--|
| (a) estimated | (h) column (f) x column (g) |
| (b) estimated | (i) REC price estimate based on market information as of 1/23/19 |
| (c) column (a) x column (b) x 8,760 | (j) column (f) x column (i) |
| (d) average of tariffs | (k) column (h) + column (j) |
| (e) column (c) x column (d) | (l) column (e) - column (k) |
| (f) per column (c) | |
| (g) Market Energy price estimate based on most recent market information | |

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Third Program Year through March 31, 2018**

Section 1: Estimated Annual Performance-Based Incentive Payments

<u>Unit</u>	<u>Unit Capacity (kW)</u> (a)	<u>Unit Availability Factor</u> (b)	<u>Estimated Program Year Output (kWh)</u> (c)	<u>Tariff Price (\$ per kWh)</u> (d)	<u>Estimated Program Year Cost</u> (e)
(1) Small Scale Solar - 15 Yr Tariff	5,404.4	14%	6,627,968	\$0.35	\$2,303,219
(2) Small Scale Solar - 20 Yr Tariff	677.8	14%	831,242	\$0.31	\$256,438
(3) Small Scale Solar II (1)	66.4	14%	81,457	\$0.28	\$22,604
(4) Medium Solar	3,369.0	14%	4,131,742	\$0.23	\$939,971
(5) Commercial Solar	6,327.0	14%	7,532,192	\$0.18	\$1,322,826
(6) Large Solar	11,850.0	14%	14,719,691	\$0.14	\$2,065,669
(7) Wind	6,000.0	21%	11,037,600	\$0.18	\$2,013,258
(8) Hydro	450.0	40%	1,576,800	\$0.22	\$353,992
(9) Anaerobic Digestion	0.0	74%	0	\$0.20	\$0
(10) Total	34,144.6		46,538,692		\$9,277,978

Section 2: Estimated Market Value

<u>Class</u>	<u>Estimated kWh Purchased Under Tariffs</u> (f)	<u>Market Energy Proxy</u> (g)	<u>Energy Market Value</u> (h)	<u>REC Proxy</u> (i)	<u>REC Market Value</u> (j)	<u>Total Market Value</u> (k)
(11) Small Scale Solar - 15 Yr Tariff	6,627,968	n/a	n/a	\$0.0168	\$111,625	\$111,625
(12) Small Scale Solar - 20 Yr Tariff	831,242	n/a	n/a	\$0.0168	\$13,999	\$13,999
(13) Small Scale Solar II (1)	81,457	n/a	n/a	\$0.0168	\$1,372	\$1,372
(14) Medium Solar	4,131,742	\$0.042	\$172,354	\$0.0168	\$69,585	\$241,938
(15) Commercial Solar	7,532,192	\$0.042	\$314,202	\$0.0168	\$126,853	\$441,055
(16) Large Solar	14,719,691	\$0.042	\$614,025	\$0.0168	\$247,901	\$861,926
(17) Wind	11,037,600	\$0.047	\$515,179	\$0.0183	\$201,689	\$716,868
(18) Hydro	1,576,800	\$0.045	\$71,063	\$0.0178	\$28,123	\$99,186
(19) Anaerobic Digestion	0	\$0.043	\$0	\$0.0178	\$0	\$0
(20) Total			\$1,686,822		\$801,146	\$2,487,968

Section 3: Estimated Net Cost

	<u>Estimated Net Cost</u> (l)
(21) Small Scale Solar - 15 Yr Tariff	\$2,191,594
(22) Small Scale Solar - 20 Yr Tariff	\$242,439
(23) Small Scale Solar II (1)	\$21,233
(24) Medium Solar	\$698,033
(25) Commercial Solar	\$881,772
(26) Large Solar	\$1,203,743
(27) Wind	\$1,296,390
(28) Hydro	\$254,806
(29) Anaerobic Digestion	\$0
(30) Total Estimated Above (Below) Market Cost	\$6,790,010

Column Descriptions:

- | | |
|--|--|
| (a) estimated | (h) column (f) x column (g) |
| (b) estimated | (i) REC price estimate based on market information as of 1/23/19 |
| (c) column (a) x column (b) x 8,760 | (j) column (f) x column (i) |
| (d) average of tariffs | (k) column (h) + column (j) |
| (e) column (c) x column (d) | (l) column (e) - column (k) |
| (f) per column (c) | |
| (g) Market Energy price estimate based on most recent market information | |

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Fourth Program Year through March 31, 2019**

Section 1: Estimated Annual Performance-Based Incentive Payments

<u>Unit</u>	<u>Unit Capacity (kW)</u> (a)	<u>Unit Availability Factor</u> (b)	<u>Estimated Program Year Output (kWh)</u> (c)	<u>Tariff Price (\$ per kWh)</u> (d)	<u>Estimated Program Year Cost</u> (e)
(1) Small Scale Solar - 15 Yr Tariff	5,698.6	14%	6,988,709	\$0.31	\$2,183,972
(2) Small Scale Solar - 20 Yr Tariff	1,015.2	14%	1,245,041	\$0.28	\$345,499
(3) Small Scale Solar II	54.2	14%	66,525	\$0.27	\$17,662
(4) Medium Solar	2,974.0	14%	3,647,314	\$0.22	\$818,822
(5) Commercial Solar	5,607.0	14%	6,675,044	\$0.19	\$1,266,590
(6) Large Solar	14,548.0	14%	18,071,060	\$0.16	\$2,846,192
(7) Wind	6,000.0	21%	11,037,600	\$0.17	\$1,835,691
(8) Hydro	0.0	40%	0	\$0.23	\$0
(9) Anaerobic Digestion	0.0	74%	0	\$0.20	\$0
(10) Total	35,897.0		47,731,293		\$9,314,427

Section 2: Estimated Market Value

<u>Class</u>	<u>Estimated kWh Purchased Under Tariffs</u> (f)	<u>Market Energy Proxy</u> (g)	<u>Energy Market Value</u> (h)	<u>REC Proxy</u> (i)	<u>REC Market Value</u> (j)	<u>Total Market Value</u> (k)
(11) Small Scale Solar - 15 Yr Tariff	6,988,709	n/a	n/a	\$0.0138	\$96,095	\$96,095
(12) Small Scale Solar - 20 Yr Tariff	1,245,041	n/a	n/a	\$0.0138	\$17,119	\$17,119
(13) Small Scale Solar II	66,525	n/a	n/a	\$0.0138	\$915	\$915
(14) Medium Solar	3,647,314	\$0.042	\$152,146	\$0.0138	\$50,151	\$202,296
(15) Commercial Solar	6,675,044	\$0.042	\$278,446	\$0.0138	\$91,782	\$370,228
(16) Large Solar	18,071,060	\$0.042	\$753,825	\$0.0138	\$248,477	\$1,002,302
(17) Wind	11,037,600	\$0.047	\$515,179	\$0.0138	\$151,767	\$666,946
(18) Hydro	0	\$0.045	\$0	\$0.0138	\$0	\$0
(19) Anaerobic Digestion	0	\$0.043	\$0	\$0.0138	\$0	\$0
(20) Total			\$1,699,597		\$656,305	\$2,355,902

Section 3: Estimated Net Cost

	<u>Estimated Net Cost</u> (l)
(21) Small Scale Solar - 15 Yr Tariff	\$2,087,877
(22) Small Scale Solar - 20 Yr Tariff	\$328,380
(23) Small Scale Solar II	\$16,748
(24) Medium Solar	\$616,525
(25) Commercial Solar	\$896,362
(26) Large Solar	\$1,843,890
(27) Wind	\$1,168,745
(28) Hydro	\$0
(29) Anaerobic Digestion	\$0
(30) Total Estimated Above (Below) Market Cost	\$6,958,525

Column Descriptions:

- (a) estimated
- (b) estimated
- (c) column (a) x column (b) x 8,760
- (d) average of tariffs
- (e) column (c) x column (d)
- (f) per column (c)
- (g) per column (d)
- (h) Market Energy price estimate based on most recent market information

- (h) column (f) x column (g)
- (i) REC price estimate based on market information as of 1/23/19
- (j) column (f) x column (i)
- (k) column (h) + column (j)
- (l) column (e) - column (k)

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Fifth Program Year through March 31, 2020**

Section 1: Estimated Annual Performance-Based Incentive Payments

<u>Unit</u>	<u>Unit Capacity (kW)</u> (a)	<u>Unit Availability Factor</u> (b)	<u>Estimated Program Year Output (kWh)</u> (c)	<u>Tariff Price (\$ per kWh)</u> (d)	<u>Estimated Program Year Cost</u> (e)
(1) Small Scale Solar - 15 Yr Tariff	9,398.0	14%	11,525,712	\$0.28	\$3,279,065
(2) Small Scale Solar - 20 Yr Tariff	1,674.5	14%	2,053,607	\$0.25	\$512,375
(3) Small Scale Solar II	89.5	14%	109,758	\$0.28	\$30,348
(4) Medium Solar	5,500.0	14%	6,745,200	\$0.24	\$1,588,495
(5) Commercial Solar	11,000.0	14%	13,095,324	\$0.19	\$2,512,993
(6) Large Solar	14,000.0	14%	17,390,352	\$0.16	\$2,832,019
(7) Wind	6,400.0	21%	11,773,440	\$0.22	\$2,552,874
(8) Hydro	500.0	40%	1,752,000	\$0.27	\$475,668
(9) Anaerobic Digestion	500.0	74%	3,223,680	\$0.21	\$672,137
(10) Commercial & Large Solar Carports	6,500.0	14%	<u>7,971,600</u>	\$0.27	<u>\$2,148,346</u>
(11) Total	55,562.0		75,640,673		\$16,604,320

Section 2: Estimated Market Value

<u>Class</u>	<u>Estimated kWh Purchased Under Tariffs</u> (f)	<u>Market Energy Proxy</u> (g)	<u>Energy Market Value</u> (h)	<u>REC Proxy</u> (i)	<u>REC Market Value</u> (j)	<u>Total Market Value</u> (k)
(12) Small Scale Solar - 15 Yr Tariff	11,525,712	n/a	n/a	\$0.0184	\$211,785	\$211,785
(13) Small Scale Solar - 20 Yr Tariff	2,053,607	n/a	n/a	\$0.0184	\$37,735	\$37,735
(14) Small Scale Solar II	109,758	n/a	n/a	\$0.0184	\$2,017	\$2,017
(15) Medium Solar	6,745,200	\$0.041	\$278,333	\$0.0184	\$123,943	\$402,276
(16) Commercial Solar	13,095,324	\$0.041	\$540,363	\$0.0184	\$240,627	\$780,990
(17) Large Solar	17,390,352	\$0.041	\$717,592	\$0.0184	\$319,548	\$1,037,140
(18) Wind	11,773,440	\$0.048	\$567,713	\$0.0184	\$216,337	\$784,050
(19) Hydro	1,752,000	\$0.046	\$80,435	\$0.0184	\$32,193	\$112,628
(20) Anaerobic Digestion	3,223,680	\$0.042	\$136,946	\$0.0184	\$59,235	\$196,182
(21) Commercial & Large Solar Carports	7,971,600	n/a	n/a	\$0.0184	<u>\$146,478</u>	<u>\$146,478</u>
(22) Total			\$2,321,382		\$1,389,897	\$3,711,280

Section 3: Estimated Net Cost

	<u>Estimated Net Cost</u> (l)
(23) Small Scale Solar - 15 Yr Tariff	\$3,067,280
(24) Small Scale Solar - 20 Yr Tariff	\$474,640
(25) Small Scale Solar II	\$28,331
(26) Medium Solar	\$1,186,219
(27) Commercial Solar	\$1,732,003
(28) Large Solar	\$1,794,879
(29) Wind	\$1,768,824
(30) Hydro	\$363,040
(31) Anaerobic Digestion	\$475,956
(32) Commercial & Large Solar Carports	<u>\$2,001,868</u>
(33) Total Estimated Above (Below) Market Cost	\$12,893,040

Column Descriptions:

- | | |
|--|--|
| (a) estimated | (h) column (f) x column (g) |
| (b) estimated | (i) REC price estimate based on market information as of 1/23/19 |
| (c) column (a) x column (b) x 8,760 | (j) column (f) x column (i) |
| (d) average of tariffs | (k) column (h) + column (j) |
| (e) column (c) x column (d) | (l) column (e) - column (k) |
| (f) per column (c) | |
| (g) per column (d) | |
| (h) Market Energy price estimate based on most recent market information | |

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Sixth Program Year through March 31, 2021**

Section 1: Estimated Annual Performance-Based Incentive Payments

Unit	Unit Capacity (kW) (a)	Unit Availability Factor (b)	Estimated Program Year Output (kWh) (c)	Tariff Price (\$ per kWh) (d)	Estimated Program Year Cost (e)	Community
(1) Small Scale Solar - 15 Yr Tariff	7,937.0	14%	9,733,937	\$0.2774	\$2,700,194	
(2) Small Scale Solar - 20 Yr Tariff	995.0	14%	1,220,268	\$0.2433	\$296,891	
(3) Small Scale Solar II	98.0	14%	120,187	\$0.2696	\$32,402	
(4) Medium Solar	3,835.0	14%	4,703,244	\$0.2296	\$1,079,865	
(5) Commercial Solar	7,675.0	14%	9,136,965	\$0.1871	\$1,709,526	
(6) Large Solar	9,765.0	14%	12,129,771	\$0.1588	\$1,926,208	
(7) Wind	4,465.0	21%	8,213,814	\$0.2168	\$1,780,755	
(8) Hydro	350.0	40%	1,226,400	\$0.2715	\$332,968	
(9) Anaerobic Digestion	350.0	74%	2,256,576	\$0.2085	\$470,496	
(10) Commercial & Large Solar Carports	4,530.0	14%	<u>5,555,592</u>	\$0.2628	<u>\$1,460,010</u>	
(11) Total	40,000.0		54,296,753		\$11,789,314	

Section 2: Estimated Market Value

Class	Estimated kWh Purchased Under Tariffs (f)	Market Energy Proxy (g)	Energy Market Value (h)	REC Proxy (i)	REC Market Value (j)	Total Market Value (k)
(12) Small Scale Solar - 15 Yr Tariff	9,733,937	n/a	n/a	\$0.0233	\$226,314	\$226,314
(13) Small Scale Solar - 20 Yr Tariff	1,220,268	n/a	n/a	\$0.0233	\$28,371	\$28,371
(14) Small Scale Solar II	120,187	n/a	n/a	\$0.0233	\$2,794	\$2,794
(15) Medium Solar	4,703,244	\$0.041	\$190,957	\$0.0233	\$109,350	\$300,308
(16) Commercial Solar	9,136,965	\$0.041	\$370,971	\$0.0233	\$212,434	\$583,406
(17) Large Solar	12,129,771	\$0.041	\$492,483	\$0.0233	\$282,017	\$774,500
(18) Wind	8,213,814	\$0.048	\$391,001	\$0.0233	\$190,971	\$581,972
(19) Hydro	1,226,400	\$0.045	\$55,540	\$0.0233	\$28,514	\$84,053
(20) Anaerobic Digestion	2,256,576	\$0.042	\$94,507	\$0.0233	\$52,465	\$146,972
(21) Commercial & Large Solar Carports	5,555,592	n/a	n/a	\$0.0233	<u>\$129,168</u>	<u>\$129,168</u>
(22) Total			\$1,595,458		\$1,262,400	\$2,857,858

Section 3: Estimated Net Cost

	Estimated Net Cost (l)
(23) Small Scale Solar - 15 Yr Tariff	\$2,473,880
(24) Small Scale Solar - 20 Yr Tariff	\$268,520
(25) Small Scale Solar II	\$29,608
(26) Medium Solar	\$779,557
(27) Commercial Solar	\$1,126,120
(28) Large Solar	\$1,151,708
(29) Wind	\$1,198,783
(30) Hydro	\$248,914
(31) Anaerobic Digestion	\$323,524
(32) Commercial & Large Solar Carports	<u>\$1,330,842</u>
(33) Total Estimated Above (Below) Market Cost	\$8,931,457

Column Descriptions:

- (a) estimated
- (b) estimated
- (c) column (a) x column (b) x 8,760
- (d) average of tariffs
- (e) column (c) x column (d)
- (f) per column (c)
- (g) per column (d)
- (h) Market Energy price estimate based on most recent market information
- (i) REC price estimate based on market information as of 1/23/19
- (j) column (f) x column (i)
- (k) column (h) + column (j)
- (l) column (e) - column (k)

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Sixth Program Year through March 31, 2022**

Section 1: Estimated Annual Performance-Based Incentive Payments

<u>Unit</u>	<u>Unit Capacity (kW)</u> (a)	<u>Unit Availability Factor</u> (b)	<u>Estimated Program Year Output (kWh)</u> (c)	<u>Tariff Price (\$ per kWh)</u> (d)	<u>Estimated Program Year Cost</u> (e)	<u>Community</u>
(1) Small Scale Solar - 15 Yr Tariff	7,937.0	14%	9,733,937	\$0.2705	\$2,633,030	
(2) Small Scale Solar - 20 Yr Tariff	995.0	14%	1,220,268	\$0.2372	\$289,448	
(3) Small Scale Solar II	98.0	14%	120,187	\$0.2629	\$31,597	
(4) Medium Solar	3,835.0	14%	4,703,244	\$0.2239	\$1,053,056	
(5) Commercial Solar	7,675.0	14%	9,136,965	\$0.1824	\$1,666,582	
(6) Large Solar	9,765.0	14%	12,129,771	\$0.1548	\$1,877,688	
(7) Wind	4,465.0	21%	8,213,814	\$0.2168	\$1,780,755	
(8) Hydro	350.0	40%	1,226,400	\$0.2715	\$332,968	
(9) Anaerobic Digestion	350.0	74%	2,256,576	\$0.2085	\$470,496	
(10) Commercial & Large Solar Carports	4,530.0	14%	<u>5,555,592</u>	\$0.2562	<u>\$1,423,343</u>	
(11) Total	40,000.0		54,296,753		\$11,558,963	

Section 2: Estimated Market Value

<u>Class</u>	<u>Estimated kWh Purchased Under Tariffs</u> (f)	<u>Market Energy Proxy</u> (g)	<u>Energy Market Value</u> (h)	<u>REC Proxy</u> (i)	<u>REC Market Value</u> (j)	<u>Total Market Value</u> (k)
(12) Small Scale Solar - 15 Yr Tariff	9,733,937	n/a	n/a	\$0.0253	\$245,782	\$245,782
(13) Small Scale Solar - 20 Yr Tariff	1,220,268	n/a	n/a	\$0.0253	\$30,812	\$30,812
(14) Small Scale Solar II	120,187	n/a	n/a	\$0.0253	\$3,035	\$3,035
(15) Medium Solar	4,703,244	\$0.040	\$189,211	\$0.0253	\$118,757	\$307,968
(16) Commercial Solar	9,136,965	\$0.040	\$367,579	\$0.0253	\$230,708	\$598,288
(17) Large Solar	12,129,771	\$0.040	\$487,980	\$0.0253	\$306,277	\$794,256
(18) Wind	8,213,814	\$0.048	\$396,029	\$0.0253	\$207,399	\$603,428
(19) Hydro	1,226,400	\$0.046	\$55,934	\$0.0253	\$30,967	\$86,901
(20) Anaerobic Digestion	2,256,576	\$0.042	\$94,260	\$0.0253	\$56,979	\$151,239
(21) Commercial & Large Solar Carports	5,555,592	n/a	n/a	\$0.0253	<u>\$140,279</u>	<u>\$140,279</u>
(22) Total			\$1,590,994		\$1,370,993	\$2,961,987

Section 3: Estimated Net Cost

	<u>Estimated Net Cost</u> (l)
(23) Small Scale Solar - 15 Yr Tariff	\$2,387,248
(24) Small Scale Solar - 20 Yr Tariff	\$258,636
(25) Small Scale Solar II	\$28,562
(26) Medium Solar	\$745,088
(27) Commercial Solar	\$1,068,295
(28) Large Solar	\$1,083,432
(29) Wind	\$1,177,327
(30) Hydro	\$246,067
(31) Anaerobic Digestion	\$319,257
(32) Commercial & Large Solar Carports	<u>\$1,283,064</u>
(33) Total Estimated Above (Below) Market Cost	\$8,596,976

Column Descriptions:

- (a) estimated
- (b) estimated
- (c) column (a) x column (b) x 8,760
- (d) average of tariffs
- (e) column (c) x column (d)
- (f) per column (c)
- (g) per column (d)
- (h) Market Energy price estimate based on most recent market information

- (h) column (f) x column (g)
- (i) REC price estimate based on market information as of 1/23/19
- (j) column (f) x column (i)
- (k) column (h) + column (j)
- (l) column (e) - column (k)

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Sixth Program Year through March 31, 2023**

Section 1: Estimated Annual Performance-Based Incentive Payments

<u>Unit</u>	<u>Unit Capacity (kW)</u> (a)	<u>Unit Availability Factor</u> (b)	<u>Estimated Program Year Output (kWh)</u> (c)	<u>Tariff Price (\$ per kWh)</u> (d)	<u>Estimated Program Year Cost</u> (e)	<u>Community</u>
(1) Small Scale Solar - 15 Yr Tariff	7,937.0	14%	9,733,937	\$0.2637	\$2,566,839	
(2) Small Scale Solar - 20 Yr Tariff	995.0	14%	1,220,268	\$0.2313	\$282,248	
(3) Small Scale Solar II	98.0	14%	120,187	\$0.2563	\$30,804	
(4) Medium Solar	3,835.0	14%	4,703,244	\$0.2183	\$1,026,718	
(5) Commercial Solar	7,675.0	14%	9,136,965	\$0.1778	\$1,624,552	
(6) Large Solar	9,765.0	14%	12,129,771	\$0.1509	\$1,830,382	
(7) Wind	4,465.0	21%	8,213,814	\$0.2168	\$1,780,755	
(8) Hydro	350.0	40%	1,226,400	\$0.2715	\$332,968	
(9) Anaerobic Digestion	350.0	74%	2,256,576	\$0.2085	\$470,496	
(10) Commercial & Large Solar Carports	4,530.0	14%	<u>5,555,592</u>	\$0.2498	<u>\$1,387,787</u>	
(11) Total	40,000.0		54,296,753		\$11,333,549	

Section 2: Estimated Market Value

<u>Class</u>	<u>Estimated kWh Purchased Under Tariffs</u> (f)	<u>Market Energy Proxy</u> (g)	<u>Energy Market Value</u> (h)	<u>REC Proxy</u> (i)	<u>REC Market Value</u> (j)	<u>Total Market Value</u> (k)
(12) Small Scale Solar - 15 Yr Tariff	9,733,937	n/a	n/a	\$0.0281	\$273,524	\$273,524
(13) Small Scale Solar - 20 Yr Tariff	1,220,268	n/a	n/a	\$0.0281	\$34,290	\$34,290
(14) Small Scale Solar II	120,187	n/a	n/a	\$0.0281	\$3,377	\$3,377
(15) Medium Solar	4,703,244	\$0.040	\$187,659	\$0.0281	\$132,161	\$319,821
(16) Commercial Solar	9,136,965	\$0.040	\$364,565	\$0.0281	\$256,749	\$621,314
(17) Large Solar	12,129,771	\$0.040	\$483,978	\$0.0281	\$340,847	\$824,824
(18) Wind	8,213,814	\$0.048	\$396,727	\$0.0281	\$230,808	\$627,535
(19) Hydro	1,226,400	\$0.046	\$56,046	\$0.0281	\$34,462	\$90,508
(20) Anaerobic Digestion	2,256,576	\$0.042	\$93,874	\$0.0281	\$63,410	\$157,283
(21) Commercial & Large Solar Carports	5,555,592	n/a	n/a	\$0.0281	<u>\$156,112</u>	<u>\$156,112</u>
(22) Total			\$1,582,849		\$1,525,739	\$3,108,588

Section 3: Estimated Net Cost

	<u>Estimated Net Cost</u> (l)
(23) Small Scale Solar - 15 Yr Tariff	\$2,293,316
(24) Small Scale Solar - 20 Yr Tariff	\$247,958
(25) Small Scale Solar II	\$27,427
(26) Medium Solar	\$706,898
(27) Commercial Solar	\$1,003,239
(28) Large Solar	\$1,005,558
(29) Wind	\$1,153,219
(30) Hydro	\$242,459
(31) Anaerobic Digestion	\$313,213
(32) Commercial & Large Solar Carports	<u>\$1,231,675</u>
(33) Total Estimated Above (Below) Market Cost	\$8,224,961

Column Descriptions:

- (a) estimated
- (b) estimated
- (c) column (a) x column (b) x 8,760
- (d) average of tariffs
- (e) column (c) x column (d)
- (f) per column (c)
- (g) per column (d)
- (h) Market Energy price estimate based on most recent market information
- (h) column (f) x column (g)
- (i) REC price estimate based on market information as of 1/23/19
- (j) column (f) x column (i)
- (k) column (h) + column (j)
- (l) column (e) - column (k)

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Sixth Program Year through March 31, 2024**

Section 1: Estimated Annual Performance-Based Incentive Payments

Unit	Unit Capacity (kW) (a)	Unit Availability Factor (b)	Estimated Program Year Output (kWh) (c)	Tariff Price (\$ per kWh) (d)	Estimated Program Year Cost (e)	Community
(1) Small Scale Solar - 15 Yr Tariff	7,937.0	14%	9,733,937	\$0.2571	\$2,502,595	
(2) Small Scale Solar - 20 Yr Tariff	995.0	14%	1,220,268	\$0.2255	\$275,170	
(3) Small Scale Solar II	98.0	14%	120,187	\$0.2499	\$30,035	
(4) Medium Solar	3,835.0	14%	4,703,244	\$0.2128	\$1,000,850	
(5) Commercial Solar	7,675.0	14%	9,136,965	\$0.1734	\$1,584,350	
(6) Large Solar	9,765.0	14%	12,129,771	\$0.1471	\$1,784,289	
(7) Wind	4,465.0	21%	8,213,814	\$0.2168	\$1,780,755	
(8) Hydro	350.0	40%	1,226,400	\$0.2715	\$332,968	
(9) Anaerobic Digestion	350.0	74%	2,256,576	\$0.2085	\$470,496	
(10) Commercial & Large Solar Carports	4,530.0	14%	<u>5,555,592</u>	\$0.2436	<u>\$1,353,342</u>	
(11) Total	40,000.0		54,296,753		\$11,114,850	

Section 2: Estimated Market Value

Class	Estimated kWh Purchased Under Tariffs (f)	Market Energy Proxy (g)	Energy Market Value (h)	REC Proxy (i)	REC Market Value (j)	Total Market Value (k)
(12) Small Scale Solar - 15 Yr Tariff	9,733,937	n/a	n/a	\$0.0312	\$303,699	\$303,699
(13) Small Scale Solar - 20 Yr Tariff	1,220,268	n/a	n/a	\$0.0312	\$38,072	\$38,072
(14) Small Scale Solar II	120,187	n/a	n/a	\$0.0312	\$3,750	\$3,750
(15) Medium Solar	4,703,244	\$0.040	\$185,778	\$0.0312	\$146,741	\$332,519
(16) Commercial Solar	9,136,965	\$0.040	\$360,910	\$0.0312	\$285,073	\$645,983
(17) Large Solar	12,129,771	\$0.040	\$479,126	\$0.0312	\$378,449	\$857,575
(18) Wind	8,213,814	\$0.048	\$397,549	\$0.0312	\$256,271	\$653,820
(19) Hydro	1,226,400	\$0.046	\$56,169	\$0.0312	\$38,264	\$94,433
(20) Anaerobic Digestion	2,256,576	\$0.041	\$93,422	\$0.0312	\$70,405	\$163,827
(21) Commercial & Large Solar Carports	5,555,592	n/a	n/a	\$0.0312	<u>\$173,334</u>	<u>\$173,334</u>
(22) Total			\$1,572,954		\$1,694,059	\$3,267,013

Section 3: Estimated Net Cost

	Estimated Net Cost (l)
(23) Small Scale Solar - 15 Yr Tariff	\$2,198,896
(24) Small Scale Solar - 20 Yr Tariff	\$237,098
(25) Small Scale Solar II	\$26,285
(26) Medium Solar	\$668,331
(27) Commercial Solar	\$938,366
(28) Large Solar	\$926,714
(29) Wind	\$1,126,935
(30) Hydro	\$238,535
(31) Anaerobic Digestion	\$306,669
(32) Commercial & Large Solar Carports	<u>\$1,180,008</u>
(33) Total Estimated Above (Below) Market Cost	\$7,847,838

Column Descriptions:

- | | |
|--|--|
| (a) estimated | (h) column (f) x column (g) |
| (b) estimated | (i) REC price estimate based on market information as of 1/23/19 |
| (c) column (a) x column (b) x 8,760 | (j) column (f) x column (i) |
| (d) average of tariffs | (k) column (h) + column (j) |
| (e) column (c) x column (d) | (l) column (e) - column (k) |
| (f) per column (c) | |
| (g) per column (d) | |
| (h) Market Energy price estimate based on most recent market information | |

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Sixth Program Year through March 31, 2025**

Section 1: Estimated Annual Performance-Based Incentive Payments

Unit	Unit Capacity (kW) (a)	Unit Availability Factor (b)	Estimated Program Year Output (kWh) (c)	Tariff Price (\$ per kWh) (d)	Estimated Program Year Cost (e)	Community
(1) Small Scale Solar - 15 Yr Tariff	7,937.0	14%	9,733,937	\$0.2507	\$2,440,298	
(2) Small Scale Solar - 20 Yr Tariff	995.0	14%	1,220,268	\$0.2199	\$268,337	
(3) Small Scale Solar II	98.0	14%	120,187	\$0.2437	\$29,290	
(4) Medium Solar	3,835.0	14%	4,703,244	\$0.2075	\$975,923	
(5) Commercial Solar	7,675.0	14%	9,136,965	\$0.1691	\$1,545,061	
(6) Large Solar	9,765.0	14%	12,129,771	\$0.1434	\$1,739,409	
(7) Wind	4,465.0	21%	8,213,814	\$0.2168	\$1,780,755	
(8) Hydro	350.0	40%	1,226,400	\$0.2715	\$332,968	
(9) Anaerobic Digestion	350.0	74%	2,256,576	\$0.2085	\$470,496	
(10) Commercial & Large Solar Carports	4,530.0	14%	<u>5,555,592</u>	\$0.2375	<u>\$1,319,453</u>	
(11) Total	40,000.0		54,296,753		\$10,901,989	

Section 2: Estimated Market Value

Class	Estimated kWh Purchased Under Tariffs (f)	Market Energy Proxy (g)	Energy Market Value (h)	REC Proxy (i)	REC Market Value (j)	Total Market Value (k)
(12) Small Scale Solar - 15 Yr Tariff	9,733,937	n/a	n/a	\$0.0347	\$337,768	\$337,768
(13) Small Scale Solar - 20 Yr Tariff	1,220,268	n/a	n/a	\$0.0347	\$42,343	\$42,343
(14) Small Scale Solar II	120,187	n/a	n/a	\$0.0347	\$4,170	\$4,170
(15) Medium Solar	4,703,244	\$0.039	\$183,897	\$0.0347	\$163,203	\$347,099
(16) Commercial Solar	9,136,965	\$0.039	\$357,255	\$0.0347	\$317,053	\$674,308
(17) Large Solar	12,129,771	\$0.039	\$474,274	\$0.0347	\$420,903	\$895,177
(18) Wind	8,213,814	\$0.049	\$398,370	\$0.0347	\$285,019	\$683,389
(19) Hydro	1,226,400	\$0.046	\$56,292	\$0.0347	\$42,556	\$98,848
(20) Anaerobic Digestion	2,256,576	\$0.041	\$92,971	\$0.0347	\$78,303	\$171,274
(21) Commercial & Large Solar Carports	5,555,592	n/a	n/a	\$0.0347	<u>\$192,779</u>	<u>\$192,779</u>
(22) Total			\$1,563,059		\$1,884,097	\$3,447,156

Section 3: Estimated Net Cost

	Estimated Net Cost (l)
(23) Small Scale Solar - 15 Yr Tariff	\$2,102,530
(24) Small Scale Solar - 20 Yr Tariff	\$225,994
(25) Small Scale Solar II	\$25,119
(26) Medium Solar	\$628,824
(27) Commercial Solar	\$870,753
(28) Large Solar	\$844,232
(29) Wind	\$1,097,366
(30) Hydro	\$234,120
(31) Anaerobic Digestion	\$299,222
(32) Commercial & Large Solar Carports	<u>\$1,126,674</u>
(33) Total Estimated Above (Below) Market Cost	\$7,454,833

Column Descriptions:

- (a) estimated
- (b) estimated
- (c) column (a) x column (b) x 8,760
- (d) average of tariffs
- (e) column (c) x column (d)
- (f) per column (c)
- (g) per column (d)
- (h) Market Energy price estimate based on most recent market information
- (i) REC price estimate based on market information as of 1/23/19
- (j) column (f) x column (i)
- (k) column (h) + column (j)
- (l) column (e) - column (k)

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Sixth Program Year through March 31, 2026**

Section 1: Estimated Annual Performance-Based Incentive Payments

<u>Unit</u>	<u>Unit Capacity (kW)</u> (a)	<u>Unit Availability Factor</u> (b)	<u>Estimated Program Year Output (kWh)</u> (c)	<u>Tariff Price (\$ per kWh)</u> (d)	<u>Estimated Program Year Cost</u> (e)	<u>Community</u>
(1) Small Scale Solar - 15 Yr Tariff	7,937.0	14%	9,733,937	\$0.2444	\$2,378,974	
(2) Small Scale Solar - 20 Yr Tariff	995.0	14%	1,220,268	\$0.2144	\$261,625	
(3) Small Scale Solar II	98.0	14%	120,187	\$0.2376	\$28,556	
(4) Medium Solar	3,835.0	14%	4,703,244	\$0.2023	\$951,466	
(5) Commercial Solar	7,675.0	14%	9,136,965	\$0.1649	\$1,506,685	
(6) Large Solar	9,765.0	14%	12,129,771	\$0.1398	\$1,695,742	
(7) Wind	4,465.0	21%	8,213,814	\$0.2168	\$1,780,755	
(8) Hydro	350.0	40%	1,226,400	\$0.2715	\$332,968	
(9) Anaerobic Digestion	350.0	74%	2,256,576	\$0.2085	\$470,496	
(10) Commercial & Large Solar Carports	4,530.0	14%	<u>5,555,592</u>	\$0.2316	<u>\$1,286,675</u>	
(11) Total	40,000.0		54,296,753		\$10,693,943	

Section 2: Estimated Market Value

<u>Class</u>	<u>Estimated kWh Purchased Under Tariffs</u> (f)	<u>Market Energy Proxy</u> (g)	<u>Energy Market Value</u> (h)	<u>REC Proxy</u> (i)	<u>REC Market Value</u> (j)	<u>Total Market Value</u> (k)
(12) Small Scale Solar - 15 Yr Tariff	9,733,937	n/a	n/a	\$0.0386	\$375,730	\$375,730
(13) Small Scale Solar - 20 Yr Tariff	1,220,268	n/a	n/a	\$0.0386	\$47,102	\$47,102
(14) Small Scale Solar II	120,187	n/a	n/a	\$0.0386	\$4,639	\$4,639
(15) Medium Solar	4,703,244	\$0.039	\$182,016	\$0.0386	\$181,545	\$363,561
(16) Commercial Solar	9,136,965	\$0.039	\$353,601	\$0.0386	\$352,687	\$706,287
(17) Large Solar	12,129,771	\$0.039	\$469,422	\$0.0386	\$468,209	\$937,631
(18) Wind	8,213,814	\$0.049	\$399,191	\$0.0386	\$317,053	\$716,245
(19) Hydro	1,226,400	\$0.046	\$56,414	\$0.0386	\$47,339	\$103,753
(20) Anaerobic Digestion	2,256,576	\$0.041	\$92,520	\$0.0386	\$87,104	\$179,623
(21) Commercial & Large Solar Carports	5,555,592	n/a	n/a	\$0.0386	<u>\$214,446</u>	<u>\$214,446</u>
(22) Total			\$1,553,164		\$2,095,855	\$3,649,018

Section 3: Estimated Net Cost

	<u>Estimated Net Cost</u> (l)
(23) Small Scale Solar - 15 Yr Tariff	\$2,003,244
(24) Small Scale Solar - 20 Yr Tariff	\$214,523
(25) Small Scale Solar II	\$23,917
(26) Medium Solar	\$587,906
(27) Commercial Solar	\$800,398
(28) Large Solar	\$758,111
(29) Wind	\$1,064,510
(30) Hydro	\$229,214
(31) Anaerobic Digestion	\$290,873
(32) Commercial & Large Solar Carports	<u>\$1,072,229</u>
(33) Total Estimated Above (Below) Market Cost	\$7,044,925

Column Descriptions:

- (a) estimated
- (b) estimated
- (c) column (a) x column (b) x 8,760
- (d) average of tariffs
- (e) column (c) x column (d)
- (f) per column (c)
- (g) per column (d)
- (h) Market Energy price estimate based on most recent market information
- (i) REC price estimate based on market information as of 1/23/19
- (j) column (f) x column (i)
- (k) column (h) + column (j)
- (l) column (e) - column (k)

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Sixth Program Year through March 31, 2027**

Section 1: Estimated Annual Performance-Based Incentive Payments

Unit	Unit Capacity (kW) (a)	Unit Availability Factor (b)	Estimated Program Year Output (kWh) (c)	Tariff Price (\$ per kWh) (d)	Estimated Program Year Cost (e)	Community
(1) Small Scale Solar - 15 Yr Tariff	7,937.0	14%	9,733,937	\$0.2383	\$2,319,597	
(2) Small Scale Solar - 20 Yr Tariff	995.0	14%	1,220,268	\$0.2090	\$255,036	
(3) Small Scale Solar II	98.0	14%	120,187	\$0.2317	\$27,847	
(4) Medium Solar	3,835.0	14%	4,703,244	\$0.1972	\$927,480	
(5) Commercial Solar	7,675.0	14%	9,136,965	\$0.1608	\$1,469,224	
(6) Large Solar	9,765.0	14%	12,129,771	\$0.1363	\$1,653,288	
(7) Wind	4,465.0	21%	8,213,814	\$0.2168	\$1,780,755	
(8) Hydro	350.0	40%	1,226,400	\$0.2715	\$332,968	
(9) Anaerobic Digestion	350.0	74%	2,256,576	\$0.2085	\$470,496	
(10) Commercial & Large Solar Carports	4,530.0	14%	<u>5,555,592</u>	\$0.2258	<u>\$1,254,453</u>	
(11) Total	40,000.0		54,296,753		\$10,491,143	

Section 2: Estimated Market Value

Class	Estimated kWh Purchased Under Tariffs (f)	Market Energy Proxy (g)	Energy Market Value (h)	REC Proxy (i)	REC Market Value (j)	Total Market Value (k)
(12) Small Scale Solar - 15 Yr Tariff	9,733,937	n/a	n/a	\$0.0429	\$417,586	\$417,586
(13) Small Scale Solar - 20 Yr Tariff	1,220,268	n/a	n/a	\$0.0429	\$52,349	\$52,349
(14) Small Scale Solar II	120,187	n/a	n/a	\$0.0429	\$5,156	\$5,156
(15) Medium Solar	4,703,244	\$0.038	\$180,605	\$0.0429	\$201,769	\$382,374
(16) Commercial Solar	9,136,965	\$0.038	\$350,859	\$0.0429	\$391,976	\$742,835
(17) Large Solar	12,129,771	\$0.038	\$465,783	\$0.0429	\$520,367	\$986,150
(18) Wind	8,213,814	\$0.049	\$400,013	\$0.0429	\$352,373	\$752,385
(19) Hydro	1,226,400	\$0.046	\$56,537	\$0.0429	\$52,613	\$109,150
(20) Anaerobic Digestion	2,256,576	\$0.041	\$92,068	\$0.0429	\$96,807	\$188,875
(21) Commercial & Large Solar Carports	5,555,592	n/a	n/a	\$0.0429	<u>\$238,335</u>	<u>\$238,335</u>
(22) Total			\$1,545,865		\$2,329,331	\$3,875,196

Section 3: Estimated Net Cost

	Estimated Net Cost (l)
(23) Small Scale Solar - 15 Yr Tariff	\$1,902,011
(24) Small Scale Solar - 20 Yr Tariff	\$202,687
(25) Small Scale Solar II	\$22,691
(26) Medium Solar	\$545,106
(27) Commercial Solar	\$726,389
(28) Large Solar	\$667,137
(29) Wind	\$1,028,370
(30) Hydro	\$223,818
(31) Anaerobic Digestion	\$281,621
(32) Commercial & Large Solar Carports	<u>\$1,016,118</u>
(33) Total Estimated Above (Below) Market Cost	\$6,615,947

Column Descriptions:

- (a) estimated
- (b) estimated
- (c) column (a) x column (b) x 8,760
- (d) average of tariffs
- (e) column (c) x column (d)
- (f) per column (c)
- (g) per column (d)
- (h) Market Energy price estimate based on most recent market information
- (h) column (f) x column (g)
- (i) REC price estimate based on market information as of 1/23/19
- (j) column (f) x column (i)
- (k) column (h) + column (j)
- (l) column (e) - column (k)

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Sixth Program Year through March 31, 2028**

Section 1: Estimated Annual Performance-Based Incentive Payments

Unit	Unit Capacity (kW) (a)	Unit Availability Factor (b)	Estimated Program Year Output (kWh) (c)	Tariff Price (\$ per kWh) (d)	Estimated Program Year Cost (e)	Community
(1) Small Scale Solar - 15 Yr Tariff	7,937.0	14%	9,733,937	\$0.2323	\$2,261,194	
(2) Small Scale Solar - 20 Yr Tariff	995.0	14%	1,220,268	\$0.2038	\$248,691	
(3) Small Scale Solar II	98.0	14%	120,187	\$0.2259	\$27,150	
(4) Medium Solar	3,835.0	14%	4,703,244	\$0.1923	\$904,434	
(5) Commercial Solar	7,675.0	14%	9,136,965	\$0.1568	\$1,432,676	
(6) Large Solar	9,765.0	14%	12,129,771	\$0.1329	\$1,612,047	
(7) Wind	4,465.0	21%	8,213,814	\$0.2168	\$1,780,755	
(8) Hydro	350.0	40%	1,226,400	\$0.2715	\$332,968	
(9) Anaerobic Digestion	350.0	74%	2,256,576	\$0.2085	\$470,496	
(10) Commercial & Large Solar Carports	4,530.0	14%	5,555,592	\$0.2202	\$1,223,341	
(11) Total	40,000.0		54,296,753		\$10,293,751	

Section 2: Estimated Market Value

Class	Estimated kWh Purchased Under Tariffs (f)	Market Energy Proxy (g)	Energy Market Value (h)	REC Proxy (i)	REC Market Value (j)	Total Market Value (k)
(12) Small Scale Solar - 15 Yr Tariff	9,733,937	n/a	n/a	\$0.0477	\$464,309	\$464,309
(13) Small Scale Solar - 20 Yr Tariff	1,220,268	n/a	n/a	\$0.0477	\$58,207	\$58,207
(14) Small Scale Solar II	120,187	n/a	n/a	\$0.0477	\$5,733	\$5,733
(15) Medium Solar	4,703,244	\$0.038	\$179,194	\$0.0477	\$224,345	\$403,538
(16) Commercial Solar	9,136,965	\$0.038	\$348,118	\$0.0477	\$435,833	\$783,952
(17) Large Solar	12,129,771	\$0.038	\$462,144	\$0.0477	\$578,590	\$1,040,734
(18) Wind	8,213,814	\$0.049	\$400,834	\$0.0477	\$391,799	\$792,633
(19) Hydro	1,226,400	\$0.046	\$56,660	\$0.0477	\$58,499	\$115,159
(20) Anaerobic Digestion	2,256,576	\$0.041	\$91,617	\$0.0477	\$107,639	\$199,256
(21) Commercial & Large Solar Carports	5,555,592	n/a	n/a	\$0.0477	\$265,002	\$265,002
(22) Total			\$1,538,567		\$2,589,955	\$4,128,522

Section 3: Estimated Net Cost

	Estimated Net Cost (l)
(23) Small Scale Solar - 15 Yr Tariff	\$1,796,885
(24) Small Scale Solar - 20 Yr Tariff	\$190,484
(25) Small Scale Solar II	\$21,417
(26) Medium Solar	\$500,895
(27) Commercial Solar	\$648,724
(28) Large Solar	\$571,312
(29) Wind	\$988,122
(30) Hydro	\$217,809
(31) Anaerobic Digestion	\$271,240
(32) Commercial & Large Solar Carports	\$958,340
(33) Total Estimated Above (Below) Market Cost	\$6,165,229

Column Descriptions:

- (a) estimated
- (b) estimated
- (c) column (a) x column (b) x 8,760
- (d) average of tariffs
- (e) column (c) x column (d)
- (f) per column (c)
- (g) per column (d)
- (h) Market Energy price estimate based on most recent market information
- (h) column (f) x column (g)
- (i) REC price estimate based on market information as of 1/23/19
- (j) column (f) x column (i)
- (k) column (h) + column (j)
- (l) column (e) - column (k)

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Sixth Program Year through March 31, 2029**

Section 1: Estimated Annual Performance-Based Incentive Payments

Unit	Unit Capacity (kW) (a)	Unit Availability Factor (b)	Estimated Program Year Output (kWh) (c)	Tariff Price (\$ per kWh) (d)	Estimated Program Year Cost (e)	Community
(1) Small Scale Solar - 15 Yr Tariff	7,937.0	14%	9,733,937	\$0.2265	\$2,204,737	
(2) Small Scale Solar - 20 Yr Tariff	995.0	14%	1,220,268	\$0.1987	\$242,467	
(3) Small Scale Solar II	98.0	14%	120,187	\$0.2203	\$26,477	
(4) Medium Solar	3,835.0	14%	4,703,244	\$0.1875	\$881,858	
(5) Commercial Solar	7,675.0	14%	9,136,965	\$0.1529	\$1,397,042	
(6) Large Solar	9,765.0	14%	12,129,771	\$0.1296	\$1,572,018	
(7) Wind	4,465.0	21%	8,213,814	\$0.2168	\$1,780,755	
(8) Hydro	350.0	40%	1,226,400	\$0.2715	\$332,968	
(9) Anaerobic Digestion	350.0	74%	2,256,576	\$0.2085	\$470,496	
(10) Commercial & Large Solar Carports	4,530.0	14%	5,555,592	\$0.2147	\$1,192,786	
(11) Total	40,000.0		54,296,753		\$10,101,604	

Section 2: Estimated Market Value

Class	Estimated kWh Purchased Under Tariffs (f)	Market Energy Proxy (g)	Energy Market Value (h)	REC Proxy (i)	REC Market Value (j)	Total Market Value (k)
(12) Small Scale Solar - 15 Yr Tariff	9,733,937	n/a	n/a	\$0.0530	\$515,899	\$515,899
(13) Small Scale Solar - 20 Yr Tariff	1,220,268	n/a	n/a	\$0.0530	\$64,674	\$64,674
(14) Small Scale Solar II	120,187	n/a	n/a	\$0.0530	\$6,370	\$6,370
(15) Medium Solar	4,703,244	\$0.038	\$177,783	\$0.0530	\$249,272	\$427,055
(16) Commercial Solar	9,136,965	\$0.038	\$345,377	\$0.0530	\$484,259	\$829,636
(17) Large Solar	12,129,771	\$0.038	\$458,505	\$0.0530	\$642,878	\$1,101,383
(18) Wind	8,213,814	\$0.049	\$401,656	\$0.0530	\$435,332	\$836,988
(19) Hydro	1,226,400	\$0.046	\$56,782	\$0.0530	\$64,999	\$121,782
(20) Anaerobic Digestion	2,256,576	\$0.040	\$91,166	\$0.0530	\$119,599	\$210,764
(21) Commercial & Large Solar Carports	5,555,592	n/a	n/a	\$0.0530	\$294,446	\$294,446
(22) Total			\$1,531,269		\$2,877,728	\$4,408,997

Section 3: Estimated Net Cost

	Estimated Net Cost (l)
(23) Small Scale Solar - 15 Yr Tariff	\$1,688,838
(24) Small Scale Solar - 20 Yr Tariff	\$177,793
(25) Small Scale Solar II	\$20,107
(26) Medium Solar	\$454,804
(27) Commercial Solar	\$567,406
(28) Large Solar	\$470,635
(29) Wind	\$943,767
(30) Hydro	\$211,186
(31) Anaerobic Digestion	\$259,732
(32) Commercial & Large Solar Carports	\$898,339
(33) Total Estimated Above (Below) Market Cost	\$5,692,607

Column Descriptions:

- (a) estimated
- (b) estimated
- (c) column (a) x column (b) x 8,760
- (d) average of tariffs
- (e) column (c) x column (d)
- (f) per column (c)
- (g) per column (d)
- (h) Market Energy price estimate based on most recent market information
- (h) column (f) x column (g)
- (i) REC price estimate based on market information as of 1/23/19
- (j) column (f) x column (i)
- (k) column (h) + column (j)
- (l) column (e) - column (k)

**Renewable Energy Growth Program Cost Recovery
Estimated Performance-Based Incentive Payments and Market Value
for the Units Approved in the Sixth Program Year through March 31, 2030**

Section 1: Estimated Annual Performance-Based Incentive Payments

Unit	Unit Capacity (kW) (a)	Unit Availability Factor (b)	Estimated Program Year Output (kWh) (c)	Tariff Price (\$ per kWh) (d)	Estimated Program Year Cost (e)	Community
(1) Small Scale Solar - 15 Yr Tariff	7,937.0	14%	9,733,937	\$0.2208	\$2,149,253	
(2) Small Scale Solar - 20 Yr Tariff	995.0	14%	1,220,268	\$0.1937	\$236,366	
(3) Small Scale Solar II	98.0	14%	120,187	\$0.2148	\$25,816	
(4) Medium Solar	3,835.0	14%	4,703,244	\$0.1828	\$859,753	
(5) Commercial Solar	7,675.0	14%	9,136,965	\$0.1491	\$1,362,321	
(6) Large Solar	9,765.0	14%	12,129,771	\$0.1264	\$1,533,203	
(7) Wind	4,465.0	21%	8,213,814	\$0.2168	\$1,780,755	
(8) Hydro	350.0	40%	1,226,400	\$0.2715	\$332,968	
(9) Anaerobic Digestion	350.0	74%	2,256,576	\$0.2085	\$470,496	
(10) Commercial & Large Solar Carports	4,530.0	14%	<u>5,555,592</u>	\$0.2093	<u>\$1,162,785</u>	
(11) Total	40,000.0		54,296,753		\$9,913,717	

Section 2: Estimated Market Value

Class	Estimated kWh Purchased Under Tariffs (f)	Market Energy Proxy (g)	Energy Market Value (h)	REC Proxy (i)	REC Market Value (j)	Total Market Value (k)
(12) Small Scale Solar - 15 Yr Tariff	9,733,937	n/a	n/a	\$0.0589	\$573,329	\$573,329
(13) Small Scale Solar - 20 Yr Tariff	1,220,268	n/a	n/a	\$0.0589	\$71,874	\$71,874
(14) Small Scale Solar II	120,187	n/a	n/a	\$0.0589	\$7,079	\$7,079
(15) Medium Solar	4,703,244	\$0.038	\$176,372	\$0.0589	\$277,021	\$453,393
(16) Commercial Solar	9,136,965	\$0.038	\$342,636	\$0.0589	\$538,167	\$880,803
(17) Large Solar	12,129,771	\$0.038	\$454,866	\$0.0589	\$714,443	\$1,169,310
(18) Wind	8,213,814	\$0.049	\$402,477	\$0.0589	\$483,794	\$886,271
(19) Hydro	1,226,400	\$0.046	\$56,905	\$0.0589	\$72,235	\$129,140
(20) Anaerobic Digestion	2,256,576	\$0.040	\$90,714	\$0.0589	\$132,912	\$223,627
(21) Commercial & Large Solar Carports	5,555,592	n/a	n/a	\$0.0589	<u>\$327,224</u>	<u>\$327,224</u>
(22) Total			\$1,523,970		\$3,198,079	\$4,722,049

Section 3: Estimated Net Cost

	Estimated Net Cost (l)
(23) Small Scale Solar - 15 Yr Tariff	\$1,575,924
(24) Small Scale Solar - 20 Yr Tariff	\$164,492
(25) Small Scale Solar II	\$18,737
(26) Medium Solar	\$406,360
(27) Commercial Solar	\$481,518
(28) Large Solar	\$363,893
(29) Wind	\$894,484
(30) Hydro	\$203,828
(31) Anaerobic Digestion	\$246,869
(32) Commercial & Large Solar Carports	<u>\$835,561</u>
(33) Total Estimated Above (Below) Market Cost	\$5,191,668

Column Descriptions:

- (a) estimated
- (b) estimated
- (c) column (a) x column (b) x 8,760
- (d) average of tariffs
- (e) column (c) x column (d)
- (f) per column (c)
- (g) per column (d)
- (h) Market Energy price estimate based on most recent market information
- (i) REC price estimate based on market information as of 1/23/19
- (j) column (f) x column (i)
- (k) column (h) + column (j)
- (l) column (e) - column (k)

PUC 4-2

Request:

Please provide the following with supporting calculations, including remuneration and total lines, as appropriate:

- a. The cost of 6.5 MW over the life of the program assuming carports are approved as filed and assuming 40% commercial solar carports and 60% large solar carports.
- b. The cost of 6.5 MW over the life of the program assuming carports are approved as filed and assuming 100% commercial solar carports.
- c. The cost of 6.5 MW over the life of the program assuming carports are approved as filed and assuming 100% large solar carports.
- d. The cost of the 6.5 MW over the life of the program assuming the 6.5MW is re-allocated 40% to commercial solar and 60% to large solar.
- e. The cost of the 6.5 MW over the life of the program assuming the 6.5MW is re-allocated 100% to commercial solar.
- f. The cost of the 6.5 MW over the life of the program assuming the 6.5MW is re-allocated 100% to large solar.

Response:

Please see attachment PUC 4-2 for the calculation of scenarios a. through f.

The Narragansett Electric Company
RE Growth Program
Analysis of Carports 6.5 MW in Program Year 2020

Scenario a.

	Percentage Split (a)	Unit Capacity (kW) (b)	Unit Availability Factor (c)	Estimated Program Year Output (d)	Tariff Price (\$ per kWh) (e)	Estimated kWh		Market Energy Proxy (h)	Energy Market Value (i)	REC Proxy (j)	REC Market Value (k)	Total Market Value (l)	Estimated Remuneration (m)	Estimated Total Year Cost (n)	Tariff Term (Years) (o)	Estimated Full Term Costs (p)
						Estimated Program Year Cost (f)	Purchased Under Tariffs (g)									
(1) Commercial Solar Carports	40%	2,600	14%	3,188,640	\$0.30	\$954,998	3,188,640	n/a	n/a	\$0.0184	\$58,591	\$58,591	\$16,712	\$913,119	20	\$18,262,378
(2) Large Solar Carports	60%	3,900	14%	4,782,960	\$0.24	\$1,145,519	4,782,960	n/a	n/a	\$0.0184	\$87,887	\$87,887	\$20,047	\$1,077,679	20	\$21,553,572
(3)		6,500		7,971,600		\$2,100,517	7,971,600				\$146,478	\$146,478	\$36,759	\$1,990,797		\$39,815,950

Scenario b.

(1) Commercial Solar Carports	100%	6,500	14%	7,971,600	\$0.30	\$2,387,494	7,971,600	n/a	n/a	\$0.0184	\$146,478	\$146,478	\$41,781	\$2,282,797	20	\$45,655,944
(2) Large Solar Carports	0%	-	14%	0	\$0.24	\$0	0	n/a	n/a	\$0.0184	\$0	\$0	\$0	\$0	20	\$0
(3)		6,500		7,971,600		\$2,387,494	7,971,600				\$146,478	\$146,478	\$41,781	\$2,282,797		\$45,655,944

Scenario c.

(1) Commercial Solar Carports	0%	-	14%	0	\$0.30	\$0	0	n/a	n/a	\$0.0184	\$0	\$0	\$0	\$0	20	\$0
(2) Large Solar Carports	100%	6,500	14%	7,971,600	\$0.24	\$1,909,198	7,971,600	n/a	n/a	\$0.0184	\$146,478	\$146,478	\$33,411	\$1,796,131	20	\$35,922,620
(3)		6,500		7,971,600		\$1,909,198	7,971,600				\$146,478	\$146,478	\$33,411	\$1,796,131		\$35,922,620

Scenario d.

(1) Commercial Solar	40%	2,600	14%	3,188,640	\$0.18	\$569,172	3,188,640	n/a	n/a	\$0.0184	\$58,591	\$58,591	\$9,961	\$520,541	20	\$10,410,830
(2) Large Solar	60%	3,900	14%	4,782,960	\$0.15	\$724,618	4,782,960	n/a	n/a	\$0.0184	\$87,887	\$87,887	\$12,681	\$649,412	20	\$12,988,247
(3)		6,500		7,971,600		\$1,293,791	7,971,600				\$146,478	\$146,478	\$22,641	\$1,169,954		\$23,399,077

Scenario e.

(1) Commercial Solar	100%	6,500	14%	7,971,600	\$0.18	\$1,422,931	7,971,600	n/a	n/a	\$0.0184	\$146,478	\$146,478	\$24,901	\$1,301,354	20	\$26,027,075
(2) Large Solar	0%	-	14%	0	\$0.15	\$0	0	n/a	n/a	\$0.0184	\$0	\$0	\$0	\$0	20	\$0
(3)		6,500		7,971,600		\$1,422,931	7,971,600				\$146,478	\$146,478	\$24,901	\$1,301,354		\$26,027,075

Scenario f.

(1) Commercial Solar	0%	-	14%	0	\$0.18	\$0	0	n/a	n/a	\$0.0184	\$0	\$0	\$0	\$0	20	\$0
(2) Large Solar	100%	6,500	14%	7,971,600	\$0.15	\$1,207,697	7,971,600	n/a	n/a	\$0.0184	\$146,478	\$146,478	\$21,135	\$1,082,354	20	\$21,647,079
(3)		6,500		7,971,600		\$1,207,697	7,971,600				\$146,478	\$146,478	\$21,135	\$1,082,354		\$21,647,079

- | | | | | | |
|-----|----------------------------------|-----|--|-----|--|
| (a) | Percentage based on data request | (g) | Per column (d) | (m) | column (f) * 1.75% |
| (b) | Allocation of 6.5 MW | (h) | Market Energy price estimate based on most recent market information | (n) | column (f) - column (l) + column (m) |
| (c) | estimated | (i) | column (g) x column (h) | (o) | Per schedule 2a Enrollment Process Rules for Solar (Greater than 25 kW), Wind, Hydro and Anaerobic Digester Projects |
| (d) | column (a) x column (b) x 8,760 | (j) | REC price estimate based on market information as of 1/23/19 | (p) | column (n) x column (o) |
| (e) | Tariff Price | (k) | column (g) x column (j) | | |
| (f) | column (d) x column (e) | (l) | column (i) + column (k) | | |

PUC 4-3

Request:

Where there is a single MW allocation for multiple classes (6.5 MW for commercial solar carports and large solar carports; 6.0 MW for community remote and non-community remote Wind I, II, III; and 1.0 MW for two anaerobic digestion and two hydropower classes), please explain how the Company will allocate awards between the categories and how it will evaluate bids received in each solicitation for different classes.

Response:

Section 2.1 of the Solicitation and Enrollment Process Rules for Solar (Greater than 25 kW), Wind, Hydro and Anaerobic Digester Projects provides the guidelines for the competitive bidding process for distributed generation projects. Selection will be made by ranking the eligible projects (for multiple Renewable Energy Classes) from the lowest bid price received to the highest, but not to exceed the applicable ceiling price (per individual Renewable Energy Class). Projects will be selected, in part, beginning with the lowest bid price and continuing to select projects up to the enrollment MW target for the applicable group of Renewable Energy Classes.