

San Ramon Valley Unified School District

TYPE OF SALE FOR NEW CLEAN RENEWABLE ENERGY BONDS

OCTOBER 6,2015







Options for Sale of CREBs to Investors

- CREBs and other forms of federal qualified tax credit bonds are typically sold to investors through a public offering or private placement
- Public Offering:
 - Bonds are made available for sale by an underwriter to all interested retail and institutional investors, with the underwriter seeking to sell the bonds at the lowest interest rate acceptable to investors
 - Public offerings are required to conform to regulations of the IRS and SEC governing municipal securities, including continuing disclosure to investors
 - All of the District's general obligation bonds have been structured as public offerings
 - The District's 2010 Qualified School Construction Bonds (QSCBs) were structured as a public offering
- Private Placement:
 - Bonds are sold to a single investor, such as a bank, usually after a comparison of bids from similar lenders regarding interest rates and financing terms
 - Private placements are not subject to SEC continuing disclosure requirements, though it may be an investor requirement
 - The District's capital leases for the purchase of computers and office equipment are typically accomplished using private placements

Summary of Options

Sale Type	Pros	Cons
Public Offering	 Flexibility on longer maturity terms available Broad market of potential investors High credit rating reflects security of bonds Comparable rates are easily accessible 	 Higher costs of issuance Official Statement and rating required Timing is extended due to additional steps (rating / POS) Continuing disclosure required by SEC Interest rates not finalized until date of sale
Private Placement	 Does not require rating or official statement Lower costs of issuance Transaction can be completed in shorter time Fixed rate lock may be available in advance of sale 	 Often require shorter maturity term Limited availability of comparable rates Prepayment terms may be less attractive to issuer Market participation subject to frequent change

Summary Analysis Public Offering vs. Private Placement										
True Interest Net Effective Rate Average Annual Net Call Fe <u>Financing Options</u> <u>Par Amount¹ Costs of Issuance² Cost (TIC) (Net of UST Subsidy)³ Positive Cashflow Prepa</u>										
Public Offering										
15 Year Term	15 Year Term \$13,244,082 \$295,290 4.25% 1.18% \$18,268 10 Y									
17 Year Term \$13,244,082 \$295,290 4.46% 1.39% \$126,903 10 Year Par										
20 Year Term	\$13,244,082	\$295,290	4.69%	1.62%	\$255,819	10 Year Par Call				
Private Placement (Hannon Armstrong)										
15 Year Term	\$13,244,082 \$210,000 3.74% 0.67% \$54,830 10 Year Par									
17 Year Term	\$13,244,082 \$210,000 3.97% 0.90% \$162,974 10 Year Par									
20 Year Term \$13,244,082 \$210,000 4.22% 1.15% \$292,396 10 Year Par Call										
Assumptions: Structure: Level Annual Net Positive Cashflow Closing Date: December 15, 2015 Deposit to Project Fund: Based on Sage Renewables "Expected Project Costs" of \$12,651,129 (Inclusive of EPC Build Costs and Soft Costs Including Contingency) Costs of Issuance: Determined By Financing Structure Interest & Subsidy Rates as of: September 28, 2015 1. Includes Deposit to Project Fund, Costs of Issuance, Capitalized Interest, and Contingency up to the full CREBs Allocation										

3. UST Subsidy as of 9/28/2015, net of Federal Sequestration for Fiscal Year 2016, is 3.07%

Summary Analysis Public Offering vs. Private Placement										
True Interest Net Effective Rate Average Annual Net Call F <u>Financing Options Par Amount¹ Costs of Issuance² Cost (TIC) (Net of UST Subsidy)³ Positive Cashflow Prep</u>										
Public Offering										
15 Year Term	\$13,244,082 \$295,290 4.25% 1.18% \$18,268									
17 Year Term	n \$13,244,082 \$295,290 4.46% 1.39% \$126,903 10 Year Par									
20 Year Term \$13,244,082 \$295,290 4.69% 1.62% \$255,819 10 Year Par										
Private Placement <u>(Bank of America)</u>										
15 Year Term	\$13,244,082 \$210,000 4.29% 1.22% \$14,753 Callable A at 102									
17 Year Term	\$13,244,082 \$210,000 4.54% 1.47% \$120,141 Callable Ar at 102									
20 Year Term \$13,244,082 \$210,000 4.79% 1.72% \$247,444 Callable Anytin at 102%										
Assumptions: Structure: Level Annual Net Positive Cashflow Closing Date: December 15, 2015 Deposit to Project Fund: Based on Sage Renewables "Expected Project Costs" of \$12,651,129 (Inclusive of EPC Build Costs and Soft Costs Including Contingency) Costs of Issuance: Determined By Financing Structure Interest & Subsidy Rates as of: September 28, 2015 1. Includes Deposit to Project Fund, Costs of Issuance, Capitalized Interest, and Contingency up to the full CREBs Allocation										

3. UST Subsidy as of 9/28/2015, net of Federal Sequestration for Fiscal Year 2016, is 3.07%

Recommendation for Private Placement

- Currently, private placement investors are actively looking for transactions of the type offered by the District:
 - Highly rated issuer
 - Final maturity of less than 20 years
 - Taxable bonds (CREBs)
 - Bond proceeds used for projects that result in energy savings
- Small sampling of private placement investors identified
 - Buyer with attractive rate expected to remain interested in purchase of District's CREBs (Hannon Armstrong)
- If Private Placement is selected, a formal, broad solicitation will be conducted to ensure the most competitive pricing
- Transaction simplicity suitable to District needs relative to final project costs, sizing and available savings
- Lower costs of issuance may result in additional proceeds available for projects

Year No.	Payment Date	Annual Gross Savings	Annual O&M Costs	Inverter Sinking Fund	Insurance Costs	Asset Management (Staff) Costs	Annual Net Savings	Annual Financing Payments (after Subsidy)	Net Annual Positive Cashflow
0	8/1/2016	_	_	_	_	-	-	_	-
1	8/1/2017	\$733,538	\$30,543	\$29,368	\$8,040	\$587	\$664,999	\$646,731	\$18,268
2	8/1/2018	\$1,100,884	\$46,264	\$42,757	\$12,178	\$890	\$998,796	\$980,528	\$18,268
3	8/1/2019	\$991,300	\$47,652	\$42,329	\$12,544	\$916	\$887,860	\$869,591	\$18,268
4	8/1/2020	\$1,011,625	\$49,081	\$41,906	\$12,920	\$944	\$906,774	\$888,506	\$18,268
5	8/1/2021	\$1,032,349	\$50,554	\$41,487	\$13,307	\$972	\$926,029	\$907,761	\$18,268
6	8/1/2022	\$1,053,481	\$52,070	\$41,072	\$13,707	\$1,001	\$945,631	\$927,363	\$18,268
7	8/1/2023	\$1,075,028	\$53,632	\$40,661	\$14,118	\$1,031	\$965,585	\$947,317	\$18,268
8	8/1/2024	\$1,096,997	\$55,241	\$40,255	\$14,541	\$1,062	\$985,898	\$967,630	\$18,268
9	8/1/2025	\$1,119,396	\$56,898	\$39,852	\$14,978	\$1,094	\$1,006,574	\$988,306	\$18,268
10	8/1/2026	\$1,142,233	\$58,605	\$39,454	\$15,427	\$1,127	\$1,027,621	\$1,009,352	\$18,268
11	8/1/2027	\$1,165,516	\$60,364	\$39,059	\$15,890	\$1,161	\$1,049,043	\$1,030,775	\$18,268
12	8/1/2028	\$1,189,253	\$62,174	\$38,668	\$16,366	\$1,196	\$1,070,848	\$1,052,580	\$18,268
13	8/1/2029	\$1,213,452	\$64,040	\$38,282	\$16,857	\$1,232	\$1,093,041	\$1,074,773	\$18,268
14	8/1/2030	\$1,238,120	\$65,961	\$37,899	\$17,363	\$1,268	\$1,115,629	\$1,097,361	\$18,268
15	8/1/2031	\$1,263,268	\$67,940	\$37,520	\$17,884	\$1,307	\$1,138,618	\$1,120,349	\$18,268
16	8/1/2032	\$1,288,903	\$69,978	\$37,145	\$18,421	\$1,346	\$1,162,014	-	\$1,162,014
17	8/1/2033	\$1,315,033	\$72,077	\$36,773	\$18,973	\$1,386	\$1,185,823	-	\$1,185,823
18	8/1/2034	\$1,341,669	\$74,240	\$36,406	\$19,542	\$1,428	\$1,210,053	-	\$1,210,053
19	8/1/2035	\$1,368,817	\$76,467	\$36,042	\$20,129	\$1,471	\$1,234,710	-	\$1,234,710
20	8/1/2036	\$1,396,489	\$78,761	\$35,681	\$20,733	\$1,515	\$1,259,800	-	\$1,259,800
21	8/1/2037	\$1,424,692	\$81,124	\$35,324	\$21,355	\$1,560	\$1,285,330	-	\$1,285,330
22	8/1/2038	\$1,453,437	\$83,557	\$34,971	\$21,995	\$1,607	\$1,311,306	-	\$1,311,306
23	8/1/2039	\$1,482,732	\$86,064	\$34,621	\$22,655	\$1,655	\$1,337,736	-	\$1,337,736
24	8/1/2040	\$1,512,587	\$88,646	\$34,275	\$23,335	\$1,705	\$1,364,627	-	\$1,364,627
25	8/1/2041	\$1,543,012	\$91,305	-	\$24,035	\$1,756	\$1,425,916	-	\$1,425,916
		\$30,553,813	\$1,623,237	\$911,806	\$427,292	\$31,216	\$27,560,261	\$14,508,923	\$13,051,337

|--|

25 Year EconomicsNominal Savings\$13,051,337PV Savings*\$8,561,543* Assumed Discount Rate at 2.0%

Year No.	Payment Date	Annual Gross Savings	Annual O&M Costs	Inverter Sinking Fund	Insurance Costs	Asset Management (Staff) Costs	Annual Net Savings	Annual Financing Payments (after Subsidy)	Net Annual Positive Cashflow
0	8/1/2016	_	_	_	-	_	-	_	-
1	8/1/2017	\$733.538	\$30.543	\$29.368	\$8.040	\$587	\$664.999	\$538.096	\$126.903
2	8/1/2018	\$1.100.884	\$46.264	\$42.757	\$12.178	\$890	\$998.796	\$871.893	\$126.903
3	8/1/2019	\$991,300	\$47,652	\$42,329	\$12,544	\$916	\$887,860	\$760,957	\$126,903
4	8/1/2020	\$1.011.625	\$49.081	\$41.906	\$12,920	\$944	\$906.774	\$779.871	\$126.903
5	8/1/2021	\$1.032.349	\$50,554	\$41.487	\$13.307	\$972	\$926.029	\$799.126	\$126.903
6	8/1/2022	\$1,053,481	\$52,070	\$41,072	\$13,707	\$1,001	\$945,631	\$818,728	\$126,903
7	8/1/2023	\$1,075,028	\$53,632	\$40,661	\$14,118	\$1,031	\$965,585	\$838,682	\$126,903
8	8/1/2024	\$1,096,997	\$55,241	\$40,255	\$14,541	\$1,062	\$985,898	\$858,995	\$126,903
9	8/1/2025	\$1,119,396	\$56,898	\$39,852	\$14,978	\$1,094	\$1,006,574	\$879,671	\$126,903
10	8/1/2026	\$1,142,233	\$58,605	\$39,454	\$15,427	\$1,127	\$1,027,621	\$900,718	\$126,903
11	8/1/2027	\$1,165,516	\$60,364	\$39,059	\$15,890	\$1,161	\$1,049,043	\$922,140	\$126,903
12	8/1/2028	\$1,189,253	\$62,174	\$38,668	\$16,366	\$1,196	\$1,070,848	\$943,945	\$126,903
13	8/1/2029	\$1,213,452	\$64,040	\$38,282	\$16,857	\$1,232	\$1,093,041	\$966,138	\$126,903
14	8/1/2030	\$1,238,120	\$65,961	\$37,899	\$17,363	\$1,268	\$1,115,629	\$988,726	\$126,903
15	8/1/2031	\$1,263,268	\$67,940	\$37,520	\$17,884	\$1,307	\$1,138,618	\$1,011,715	\$126,903
16	8/1/2032	\$1,288,903	\$69,978	\$37,145	\$18,421	\$1,346	\$1,162,014	\$1,035,111	\$126,903
17	8/1/2033	\$1,315,033	\$72,077	\$36,773	\$18,973	\$1,386	\$1,185,823	\$1,058,920	\$126,903
18	8/1/2034	\$1,341,669	\$74,240	\$36,406	\$19,542	\$1,428	\$1,210,053	-	\$1,210,053
19	8/1/2035	\$1,368,817	\$76,467	\$36,042	\$20,129	\$1,471	\$1,234,710	-	\$1,234,710
20	8/1/2036	\$1,396,489	\$78,761	\$35,681	\$20,733	\$1,515	\$1,259,800	-	\$1,259,800
21	8/1/2037	\$1,424,692	\$81,124	\$35,324	\$21,355	\$1,560	\$1,285,330	-	\$1,285,330
22	8/1/2038	\$1,453,437	\$83,557	\$34,971	\$21,995	\$1,607	\$1,311,306	-	\$1,311,306
23	8/1/2039	\$1,482,732	\$86,064	\$34,621	\$22,655	\$1,655	\$1,337,736	-	\$1,337,736
24	8/1/2040	\$1,512,587	\$88,646	\$34,275	\$23,335	\$1,705	\$1,364,627	-	\$1,364,627
25	8/1/2041	\$1,543,012	\$91,305	-	\$24,035	\$1,756	\$1,425,916	-	\$1,425,916
		\$30,553,813	\$1,623,237	\$911,806	\$427,292	\$31,216	\$27,560,261	\$14,973,432	\$12,586,829

|--|

25 Year EconomicsNominal Savings\$12,586,829PV Savings*\$8,449,400* Assumed Discount Rate at 2.0%

Year No.	Payment Date	Annual Gross Savings	Annual O&M Costs	Inverter Sinking Fund	Insurance Costs	Asset Management (Staff) Costs	Annual Net Savings	Annual Financing Payments (after Subsidy)	Net Annual Positive Cashflow
0	8/1/2016	_	_	_	_	_	-	_	-
1	8/1/2017	\$733.538	\$30.543	\$29.368	\$8.040	\$587	\$664.999	\$409.180	\$255.819
2	8/1/2018	\$1.100.884	\$46.264	\$42.757	\$12.178	\$890	\$998.796	\$742.977	\$255.819
3	8/1/2019	\$991,300	\$47,652	\$42,329	\$12,544	\$916	\$887,860	\$632,041	\$255,819
4	8/1/2020	\$1.011.625	\$49.081	\$41.906	\$12,920	\$944	\$906.774	\$650.955	\$255.819
5	8/1/2021	\$1.032.349	\$50,554	\$41.487	\$13.307	\$972	\$926.029	\$670.211	\$255.819
6	8/1/2022	\$1,053,481	\$52,070	\$41,072	\$13,707	\$1,001	\$945,631	\$689,812	\$255,819
7	8/1/2023	\$1,075,028	\$53,632	\$40,661	\$14,118	\$1,031	\$965,585	\$709,767	\$255,819
8	8/1/2024	\$1,096,997	\$55,241	\$40,255	\$14,541	\$1,062	\$985,898	\$730,079	\$255,819
9	8/1/2025	\$1,119,396	\$56,898	\$39,852	\$14,978	\$1,094	\$1,006,574	\$750,755	\$255,819
10	8/1/2026	\$1,142,233	\$58,605	\$39,454	\$15,427	\$1,127	\$1,027,621	\$771,802	\$255,819
11	8/1/2027	\$1,165,516	\$60,364	\$39,059	\$15,890	\$1,161	\$1,049,043	\$793,224	\$255,819
12	8/1/2028	\$1,189,253	\$62,174	\$38,668	\$16,366	\$1,196	\$1,070,848	\$815,029	\$255,819
13	8/1/2029	\$1,213,452	\$64,040	\$38,282	\$16,857	\$1,232	\$1,093,041	\$837,222	\$255,819
14	8/1/2030	\$1,238,120	\$65,961	\$37,899	\$17,363	\$1,268	\$1,115,629	\$859,810	\$255,819
15	8/1/2031	\$1,263,268	\$67,940	\$37,520	\$17,884	\$1,307	\$1,138,618	\$882,799	\$255,819
16	8/1/2032	\$1,288,903	\$69,978	\$37,145	\$18,421	\$1,346	\$1,162,014	\$906,195	\$255,819
17	8/1/2033	\$1,315,033	\$72,077	\$36,773	\$18,973	\$1,386	\$1,185,823	\$930,005	\$255,819
18	8/1/2034	\$1,341,669	\$74,240	\$36,406	\$19,542	\$1,428	\$1,210,053	\$954,235	\$255,819
19	8/1/2035	\$1,368,817	\$76,467	\$36,042	\$20,129	\$1,471	\$1,234,710	\$978,891	\$255,819
20	8/1/2036	\$1,396,489	\$78,761	\$35,681	\$20,733	\$1,515	\$1,259,800	\$1,003,981	\$255,819
21	8/1/2037	\$1,424,692	\$81,124	\$35,324	\$21,355	\$1,560	\$1,285,330	-	\$1,285,330
22	8/1/2038	\$1,453,437	\$83,557	\$34,971	\$21,995	\$1,607	\$1,311,306	-	\$1,311,306
23	8/1/2039	\$1,482,732	\$86,064	\$34,621	\$22,655	\$1,655	\$1,337,736	-	\$1,337,736
24	8/1/2040	\$1,512,587	\$88,646	\$34,275	\$23,335	\$1,705	\$1,364,627	-	\$1,364,627
25	8/1/2041	\$1,543,012	\$91,305	-	\$24,035	\$1,756	\$1,425,916	-	\$1,425,916
		\$30,553,813	\$1,623,237	\$911,806	\$427,292	\$31,216	\$27,560,261	\$15,718,971	\$11,841,290

Sample Cashflow Schedule (Public	Offering	20 Year	Term
----------------------------------	----------	---------	------

25 Year EconomicsNominal Savings\$11,841,290PV Savings*\$8,279,537* Assumed Discount Rate at 2.0%

Year No.	Payment Date	Annual Gross Savings	Annual O&M Costs	Inverter Sinking Fund	Insurance Costs	Asset Management (Staff) Costs	Annual Net Savings	Annual Financing Payments (after Subsidy)	Net Annual Positive Cashflow
0	8/1/2016	_	_	_	_	-	_	-	_
1	8/1/2017	\$733.538	\$30.543	\$29,368	\$8.040	\$587	\$664,999	\$610,169	\$54,830
2	8/1/2018	\$1,100,884	\$46,264	\$42,757	\$12,178	\$890	\$998.796	\$943,966	\$54,830
3	8/1/2019	\$991.300	\$47.652	\$42.329	\$12.544	\$916	\$887.860	\$833.029	\$54.830
4	8/1/2020	\$1.011.625	\$49.081	\$41.906	\$12.920	\$944	\$906.774	\$851.944	\$54.830
5	8/1/2021	\$1.032.349	\$50,554	\$41.487	\$13.307	\$972	\$926.029	\$871.199	\$54.830
6	8/1/2022	\$1.053.481	\$52.070	\$41.072	\$13.707	\$1.001	\$945.631	\$890.801	\$54.830
7	8/1/2023	\$1.075.028	\$53.632	\$40.661	\$14.118	\$1.031	\$965,585	\$910.755	\$54.830
8	8/1/2024	\$1,096,997	\$55,241	\$40,255	\$14,541	\$1,062	\$985,898	\$931,067	\$54,830
9	8/1/2025	\$1,119,396	\$56,898	\$39,852	\$14,978	\$1,094	\$1,006,574	\$951,744	\$54,830
10	8/1/2026	\$1,142,233	\$58,605	\$39,454	\$15,427	\$1,127	\$1,027,621	\$972,790	\$54,830
11	8/1/2027	\$1,165,516	\$60,364	\$39,059	\$15,890	\$1,161	\$1,049,043	\$994,213	\$54,830
12	8/1/2028	\$1,189,253	\$62,174	\$38,668	\$16,366	\$1,196	\$1,070,848	\$1,016,018	\$54,830
13	8/1/2029	\$1,213,452	\$64,040	\$38,282	\$16,857	\$1,232	\$1,093,041	\$1,038,211	\$54,830
14	8/1/2030	\$1,238,120	\$65,961	\$37,899	\$17,363	\$1,268	\$1,115,629	\$1,060,799	\$54,830
15	8/1/2031	\$1,263,268	\$67,940	\$37,520	\$17,884	\$1,307	\$1,138,618	\$1,083,787	\$54,830
16	8/1/2032	\$1,288,903	\$69,978	\$37,145	\$18,421	\$1,346	\$1,162,014	-	\$1,162,014
17	8/1/2033	\$1,315,033	\$72,077	\$36,773	\$18,973	\$1,386	\$1,185,823	-	\$1,185,823
18	8/1/2034	\$1,341,669	\$74,240	\$36,406	\$19,542	\$1,428	\$1,210,053	-	\$1,210,053
19	8/1/2035	\$1,368,817	\$76,467	\$36,042	\$20,129	\$1,471	\$1,234,710	-	\$1,234,710
20	8/1/2036	\$1,396,489	\$78,761	\$35,681	\$20,733	\$1,515	\$1,259,800	-	\$1,259,800
21	8/1/2037	\$1,424,692	\$81,124	\$35,324	\$21,355	\$1,560	\$1,285,330	-	\$1,285,330
22	8/1/2038	\$1,453,437	\$83,557	\$34,971	\$21,995	\$1,607	\$1,311,306	-	\$1,311,306
23	8/1/2039	\$1,482,732	\$86,064	\$34,621	\$22,655	\$1,655	\$1,337,736	-	\$1,337,736
24	8/1/2040	\$1,512,587	\$88,646	\$34,275	\$23,335	\$1,705	\$1,364,627	-	\$1,364,627
25	8/1/2041	\$1,543,012	\$91,305	-	\$24,035	\$1,756	\$1,425,916	-	\$1,425,916
		\$30,553,813	\$1,623,237	\$911,806	\$427,292	\$31,216	\$27,560,261	\$13,960,491	\$13,599,770

Sample Cashflow Schedule	(Private Placement Hannon Armstron	g 15 Year Term)
Sumple cushinow Senedule		

25 Year EconomicsNominal Savings\$13,599,770PV Savings*\$9,022,128* Assumed Discount Rate at 2.0%\$

Year No.	Payment Date	Annual Gross Savings	Annual O&M Costs	Inverter Sinking Fund	Insurance Costs	Asset Management (Staff) Costs	Annual Net Savings	Annual Financing Payments (after Subsidy)	Net Annual Positive Cashflow
0	8/1/2016	_	_	_	_	_	_	_	_
1	8/1/2017	\$733.538	\$30.543	\$29,368	\$8.040	\$587	\$664,999	\$502.025	\$162,974
2	8/1/2018	\$1,100,884	\$46,264	\$42,757	\$12,178	\$890	\$998.796	\$835.821	\$162,974
3	8/1/2019	\$991.300	\$47.652	\$42.329	\$12.544	\$916	\$887.860	\$724.885	\$162.974
4	8/1/2020	\$1.011.625	\$49.081	\$41.906	\$12.920	\$944	\$906.774	\$743.800	\$162.974
5	8/1/2021	\$1.032.349	\$50,554	\$41.487	\$13.307	\$972	\$926.029	\$763.055	\$162.974
6	8/1/2022	\$1.053.481	\$52.070	\$41.072	\$13,707	\$1.001	\$945.631	\$782.657	\$162.974
7	8/1/2023	\$1.075.028	\$53.632	\$40.661	\$14.118	\$1.031	\$965,585	\$802.611	\$162.974
8	8/1/2024	\$1,096,997	\$55,241	\$40,255	\$14,541	\$1,062	\$985,898	\$822,923	\$162,974
9	8/1/2025	\$1,119,396	\$56,898	\$39,852	\$14,978	\$1,094	\$1,006,574	\$843,600	\$162,974
10	8/1/2026	\$1,142,233	\$58,605	\$39,454	\$15,427	\$1,127	\$1,027,621	\$864,646	\$162,974
11	8/1/2027	\$1,165,516	\$60,364	\$39,059	\$15,890	\$1,161	\$1,049,043	\$886,069	\$162,974
12	8/1/2028	\$1,189,253	\$62,174	\$38,668	\$16,366	\$1,196	\$1,070,848	\$907,873	\$162,974
13	8/1/2029	\$1,213,452	\$64,040	\$38,282	\$16,857	\$1,232	\$1,093,041	\$930,067	\$162,974
14	8/1/2030	\$1,238,120	\$65,961	\$37,899	\$17,363	\$1,268	\$1,115,629	\$952,654	\$162,974
15	8/1/2031	\$1,263,268	\$67,940	\$37,520	\$17,884	\$1,307	\$1,138,618	\$975,643	\$162,974
16	8/1/2032	\$1,288,903	\$69,978	\$37,145	\$18,421	\$1,346	\$1,162,014	\$999,039	\$162,974
17	8/1/2033	\$1,315,033	\$72,077	\$36,773	\$18,973	\$1,386	\$1,185,823	\$1,022,849	\$162,974
18	8/1/2034	\$1,341,669	\$74,240	\$36,406	\$19,542	\$1,428	\$1,210,053	-	\$1,210,053
19	8/1/2035	\$1,368,817	\$76,467	\$36,042	\$20,129	\$1,471	\$1,234,710	-	\$1,234,710
20	8/1/2036	\$1,396,489	\$78,761	\$35,681	\$20,733	\$1,515	\$1,259,800	-	\$1,259,800
21	8/1/2037	\$1,424,692	\$81,124	\$35,324	\$21,355	\$1,560	\$1,285,330	-	\$1,285,330
22	8/1/2038	\$1,453,437	\$83,557	\$34,971	\$21,995	\$1,607	\$1,311,306	-	\$1,311,306
23	8/1/2039	\$1,482,732	\$86,064	\$34,621	\$22,655	\$1,655	\$1,337,736	-	\$1,337,736
24	8/1/2040	\$1,512,587	\$88,646	\$34,275	\$23,335	\$1,705	\$1,364,627	-	\$1,364,627
25	8/1/2041	\$1,543,012	\$91,305	-	\$24,035	\$1,756	\$1,425,916	-	\$1,425,916
		\$30,553,813	\$1,623,237	\$911,806	\$427,292	\$31,216	\$27,560,261	\$14,360,217	\$13,200,044

Sample Cashflow Schedule	(Private Placement Hannon Armstron	g 17 Year Term)
Sumple cushinow Schedule		5 1 / icui iciiii/

25 Year Economics						
Ν	Iominal Savings	\$13,200,044				
	PV Savings*	\$8,954,820				
Assumed Discount Rate	e at 2.0%					

Year No.	Payment Date	Annual Gross Savings	Annual O&M Costs	Inverter Sinking Fund	Insurance Costs	Asset Management (Staff) Costs	Annual Net Savings	Annual Financing Payments (after Subsidy)	Net Annual Positive Cashflow
0	0/4/2046								
0	8/1/2016	- 6700 F00	- 620 E 42	- 620.209	- 69.040	- 6507	- ¢cc4.000	- 6272 CO4	- 6202.200
1	8/1/2017	\$733,538	\$30,543	\$29,308 \$40,757	\$8,040 \$12,178	\$587 \$800	\$664,999 \$008 7 00	\$372,604	\$292,396
2	8/1/2018	\$1,100,884 \$001,200	\$40,204 \$47,652	\$42,757 \$42,220	\$12,178 \$12,544	\$890 \$016	\$998,790	\$706,400 \$FOF 464	\$292,390
2	8/1/2019	\$991,500	\$47,052	\$42,529	\$12,544 \$12,000	\$910	\$000,000 \$000,774	\$393,404 \$614,379	\$292,390
4	8/1/2020	\$1,011,025	\$49,081	\$41,906	\$12,920	\$944 \$072	\$906,774	\$014,378 \$622,624	\$292,396
5	8/1/2021	\$1,032,349 \$1,052,491	\$50,554 \$50,554	\$41,487 \$41,072	\$13,307 \$12,707	\$972 ¢1.001	\$926,029	2033,034 6652,226	\$292,390
0	8/1/2022	\$1,033,461 \$1,075,039	\$52,070 \$52,070	\$41,072 \$40,661	\$15,707 \$14,119	\$1,001 \$1,021	\$945,051 ¢065 595	2023,230 \$672,100	\$292,390
0	8/1/2023	\$1,075,028 \$1,006,007	\$55,052 6EE 241	\$40,001 \$40,255	\$14,110 \$14 E41	\$1,051 \$1,051	2902,202	\$073,190 \$073,190	\$292,390 \$202,206
0	8/1/2024 8/1/2025	\$1,090,997	\$55,241 \$EC 909	340,255 \$20,853	\$14,541 \$14,079	\$1,00Z	\$965,696 \$1,006 E74	2093,302 \$714,179	\$292,390
9	8/1/2025	\$1,119,390 \$1,142,222	\$50,898 659,696	\$39,652 \$20.454	\$14,978 \$15,407	\$1,094 ¢1 127	\$1,000,574	\$714,170 \$725 225	\$292,390 \$202,206
10	8/1/2020	\$1,142,233 \$1,165,510	\$50,005 \$C0,204	\$39,454 \$30,050	\$15,427 615 800	\$1,127	\$1,027,021	\$755,225 \$756,647	\$292,390
11	0/1/2027 0/1/2020	\$1,103,310 \$1,100,353	\$00,304 \$62,174	\$39,059 \$39,659	\$15,690 \$16,266	\$1,101 \$1,106	\$1,049,045 \$1,070,949	\$750,047 \$770,453	\$292,390 \$202,206
12	8/1/2028	\$1,109,233 \$1,212,452	\$02,174 \$64,040	000,005 600,000	\$10,300 \$16,957	\$1,190 ¢1 222	\$1,070,848	\$776,452 \$900.64E	\$292,390
15	8/1/2029	\$1,213,432 \$1,228,430	\$04,040 \$CF 0C1	\$36,262	\$10,857 \$17,262	\$1,252	\$1,095,041	3000,045 6022 222	\$292,390
14	8/1/2030	\$1,238,120	\$65,961 \$67,040	\$37,899 ¢27,520	\$17,303	\$1,208 \$1,207	\$1,115,629	\$823,233 \$846,222	\$292,396
15	8/1/2031	\$1,203,208	\$67,940 \$60,0 7 8	\$37,520 \$37,4F	\$17,884	\$1,307	\$1,138,018	\$840,222	\$292,396
10	8/1/2032	\$1,288,903	\$69,978	\$37,145	\$18,421	\$1,346	\$1,162,014	\$869,618	\$292,396
1/	8/1/2033	\$1,315,033	\$72,077	\$36,773	\$18,973	\$1,386	\$1,185,823	\$893,428	\$292,396
18	8/1/2034	\$1,341,669	\$74,240	\$36,406	\$19,542	\$1,428	\$1,210,053	\$917,658	\$292,396
19	8/1/2035	\$1,368,817	\$76,467	\$36,042	\$20,129	\$1,471	\$1,234,710	\$942,314	\$292,396
20	8/1/2036	\$1,396,489	\$78,761	\$35,681	\$20,733	\$1,515	\$1,259,800	\$967,404	\$292,396
21	8/1/2037	\$1,424,692	\$81,124	\$35,324	\$21,355	\$1,560	\$1,285,330	-	\$1,285,330
22	8/1/2038	\$1,453,437	\$83,557	\$34,971	\$21,995	\$1,607	\$1,311,306	-	\$1,311,306
23	8/1/2039	\$1,482,732	\$86,064	\$34,621	\$22,655	\$1,655	\$1,337,736	-	\$1,337,736
24	8/1/2040	\$1,512,587	\$88,646	\$34,275	\$23,335	\$1,705	\$1,364,627	-	\$1,364,627
25	8/1/2041	\$1,543,012	\$91,305	-	\$24,035	\$1,756	\$1,425,916	-	\$1,425,916
		\$30,553,813	\$1,623,237	\$911,806	\$427,292	\$31,216	\$27,560,261	\$14,987,433	\$12,572,828

Sample Cashflow Schedule	(Private Placement F	Hannon Armstrong	- 20 Year Term)
Sample casimow Schedule	r nvate r lacement i	annon Annstrong	- 20 rear rennij

25 Year EconomicsNominal Savings\$12,572,828PV Savings*\$8,865,894* Assumed Discount Rate at 2.0%\$

Year No.	Payment Date	Annual Gross Savings	Annual O&M Costs	Inverter Sinking Fund	Insurance Costs	Asset Management (Staff) Costs	Annual Net Savings	Annual Financing Payments (after Subsidy)	Net Annual Positive Cashflow
0	8/1/2016	-	-	-	-	-	-	-	-
1	8/1/2017	\$733.538	\$30,543	\$29.368	\$8.040	\$587	\$664.999	\$650.246	\$14.753
2	8/1/2018	\$1.100.884	\$46.264	\$42,757	\$12,178	\$890	\$998.796	\$984.043	\$14,753
3	8/1/2019	\$991,300	\$47,652	\$42,329	\$12,544	\$916	\$887,860	\$873,107	\$14,753
4	8/1/2020	\$1,011,625	\$49,081	\$41,906	\$12,920	\$944	\$906,774	\$892,021	\$14,753
5	8/1/2021	\$1,032,349	\$50,554	\$41,487	\$13,307	\$972	\$926,029	\$911,277	\$14,753
6	8/1/2022	\$1,053,481	\$52,070	\$41,072	\$13,707	\$1,001	\$945,631	\$930,878	\$14,753
7	8/1/2023	\$1,075,028	\$53,632	\$40,661	\$14,118	\$1,031	\$965,585	\$950,833	\$14,753
8	8/1/2024	\$1,096,997	\$55,241	\$40,255	\$14,541	\$1,062	\$985,898	\$971,145	\$14,753
9	8/1/2025	\$1,119,396	\$56,898	\$39,852	\$14,978	\$1,094	\$1,006,574	\$991,821	\$14,753
10	8/1/2026	\$1,142,233	\$58,605	\$39,454	\$15,427	\$1,127	\$1,027,621	\$1,012,868	\$14,753
11	8/1/2027	\$1,165,516	\$60,364	\$39,059	\$15,890	\$1,161	\$1,049,043	\$1,034,290	\$14,753
12	8/1/2028	\$1,189,253	\$62,174	\$38,668	\$16,366	\$1,196	\$1,070,848	\$1,056,095	\$14,753
13	8/1/2029	\$1,213,452	\$64,040	\$38,282	\$16,857	\$1,232	\$1,093,041	\$1,078,288	\$14,753
14	8/1/2030	\$1,238,120	\$65,961	\$37,899	\$17,363	\$1,268	\$1,115,629	\$1,100,876	\$14,753
15	8/1/2031	\$1,263,268	\$67,940	\$37,520	\$17,884	\$1,307	\$1,138,618	\$1,123,865	\$14,753
16	8/1/2032	\$1,288,903	\$69,978	\$37,145	\$18,421	\$1,346	\$1,162,014	-	\$1,162,014
17	8/1/2033	\$1,315,033	\$72,077	\$36,773	\$18,973	\$1,386	\$1,185,823	-	\$1,185,823
18	8/1/2034	\$1,341,669	\$74,240	\$36,406	\$19,542	\$1,428	\$1,210,053	-	\$1,210,053
19	8/1/2035	\$1,368,817	\$76,467	\$36,042	\$20,129	\$1,471	\$1,234,710	-	\$1,234,710
20	8/1/2036	\$1,396,489	\$78,761	\$35,681	\$20,733	\$1,515	\$1,259,800	-	\$1,259,800
21	8/1/2037	\$1,424,692	\$81,124	\$35,324	\$21,355	\$1,560	\$1,285,330	-	\$1,285,330
22	8/1/2038	\$1,453,437	\$83,557	\$34,971	\$21,995	\$1,607	\$1,311,306	-	\$1,311,306
23	8/1/2039	\$1,482,732	\$86,064	\$34,621	\$22,655	\$1,655	\$1,337,736	-	\$1,337,736
24	8/1/2040	\$1,512,587	\$88,646	\$34,275	\$23,335	\$1,705	\$1,364,627	-	\$1,364,627
25	8/1/2041	\$1,543,012	\$91,305	-	\$24,035	\$1,756	\$1,425,916	-	\$1,425,916
		\$30,553,813	\$1,623,237	\$911,806	\$427,292	\$31,216	\$27,560,261	\$14,561,653	\$12,998,608

25 Year EconomicsNominal Savings\$12,998,608PV Savings*\$8,517,260* Assumed Discount Rate at 2.0%

Year No.	Payment Date	Annual Gross Savings	Annual O&M Costs	Inverter Sinking Fund	Insurance Costs	Asset Management (Staff) Costs	Annual Net Savings	Annual Financing Payments (after Subsidy)	Net Annual Positive Cashflow
0	8/1/2016	_	_	_	_	-	-	_	-
1	8/1/2017	\$733.538	\$30.543	\$29,368	\$8.040	\$587	\$664,999	\$544,858	\$120,141
2	8/1/2018	\$1.100.884	\$46.264	\$42.757	\$12.178	\$890	\$998.796	\$878.655	\$120.141
3	8/1/2019	\$991.300	\$47.652	\$42.329	\$12,544	\$916	\$887.860	\$767.719	\$120.141
4	8/1/2020	\$1.011.625	\$49.081	\$41.906	\$12,920	\$944	\$906.774	\$786.633	\$120.141
5	8/1/2021	\$1.032.349	\$50,554	\$41.487	\$13.307	\$972	\$926.029	\$805.889	\$120.141
6	8/1/2022	\$1,053,481	\$52,070	\$41,072	\$13,707	\$1,001	\$945,631	\$825,490	\$120,141
7	8/1/2023	\$1,075,028	\$53,632	\$40,661	\$14,118	\$1,031	\$965,585	\$845,445	\$120,141
8	8/1/2024	\$1,096,997	\$55,241	\$40,255	\$14,541	\$1,062	\$985,898	\$865,757	\$120,141
9	8/1/2025	\$1,119,396	\$56,898	\$39,852	\$14,978	\$1,094	\$1,006,574	\$886,433	\$120,141
10	8/1/2026	\$1,142,233	\$58,605	\$39,454	\$15,427	\$1,127	\$1,027,621	\$907,480	\$120,141
11	8/1/2027	\$1,165,516	\$60,364	\$39,059	\$15,890	\$1,161	\$1,049,043	\$928,902	\$120,141
12	8/1/2028	\$1,189,253	\$62,174	\$38,668	\$16,366	\$1,196	\$1,070,848	\$950,707	\$120,141
13	8/1/2029	\$1,213,452	\$64,040	\$38,282	\$16,857	\$1,232	\$1,093,041	\$972,900	\$120,141
14	8/1/2030	\$1,238,120	\$65,961	\$37,899	\$17,363	\$1,268	\$1,115,629	\$995 <i>,</i> 488	\$120,141
15	8/1/2031	\$1,263,268	\$67,940	\$37,520	\$17,884	\$1,307	\$1,138,618	\$1,018,477	\$120,141
16	8/1/2032	\$1,288,903	\$69,978	\$37,145	\$18,421	\$1,346	\$1,162,014	\$1,041,873	\$120,141
17	8/1/2033	\$1,315,033	\$72,077	\$36,773	\$18,973	\$1,386	\$1,185,823	\$1,065,683	\$120,141
18	8/1/2034	\$1,341,669	\$74,240	\$36,406	\$19,542	\$1,428	\$1,210,053	-	\$1,210,053
19	8/1/2035	\$1,368,817	\$76,467	\$36,042	\$20,129	\$1,471	\$1,234,710	-	\$1,234,710
20	8/1/2036	\$1,396,489	\$78,761	\$35,681	\$20,733	\$1,515	\$1,259,800	-	\$1,259,800
21	8/1/2037	\$1,424,692	\$81,124	\$35,324	\$21,355	\$1,560	\$1,285,330	-	\$1,285,330
22	8/1/2038	\$1,453,437	\$83,557	\$34,971	\$21,995	\$1,607	\$1,311,306	-	\$1,311,306
23	8/1/2039	\$1,482,732	\$86,064	\$34,621	\$22,655	\$1,655	\$1,337,736	-	\$1,337,736
24	8/1/2040	\$1,512,587	\$88,646	\$34,275	\$23,335	\$1,705	\$1,364,627	-	\$1,364,627
25	8/1/2041	\$1,543,012	\$91,305	-	\$24,035	\$1,756	\$1,425,916	-	\$1,425,916
		\$30,553,813	\$1,623,237	\$911,806	\$427,292	\$31,216	\$27,560,261	\$15,088,388	\$12,471,872

25 Year Economics					
N	ominal Savings	\$12,471,872			
	PV Savings*	\$8,354,651			
Assumed Discount Rate	at 2.0%				

Year No.	Payment Date	Annual Gross Savings	Annual O&M Costs	Inverter Sinking Fund	Insurance Costs	Asset Management (Staff) Costs	Annual Net Savings	Annual Financing Payments (after Subsidy)	Net Annual Positive Cashflow
0	8/1/2016	_	_	_	_	-	_	-	-
1	8/1/2017	\$733.538	\$30,543	\$29,368	\$8.040	\$587	\$664,999	\$417,555	\$247,444
2	8/1/2018	\$1,100,884	\$46,264	\$42,757	\$12,178	\$890	\$998,796	\$751.352	\$247.444
3	8/1/2019	\$991.300	\$47.652	\$42.329	\$12.544	\$916	\$887.860	\$640.415	\$247.444
4	8/1/2020	\$1.011.625	\$49.081	\$41.906	\$12.920	\$944	\$906.774	\$659.330	\$247.444
5	8/1/2021	\$1.032.349	\$50,554	\$41.487	\$13.307	\$972	\$926.029	\$678.585	\$247.444
6	8/1/2022	\$1.053.481	\$52.070	\$41.072	\$13.707	\$1.001	\$945.631	\$698.187	\$247.444
7	8/1/2023	\$1.075.028	\$53.632	\$40.661	\$14.118	\$1.031	\$965.585	\$718.141	\$247.444
8	8/1/2024	\$1,096,997	\$55,241	\$40,255	\$14,541	\$1,062	\$985,898	\$738,453	\$247,444
9	8/1/2025	\$1,119,396	\$56,898	\$39,852	\$14,978	\$1,094	\$1,006,574	\$759,130	\$247,444
10	8/1/2026	\$1,142,233	\$58,605	\$39,454	\$15,427	\$1,127	\$1,027,621	\$780,176	\$247,444
11	8/1/2027	\$1,165,516	\$60,364	\$39,059	\$15,890	\$1,161	\$1,049,043	\$801,599	\$247,444
12	8/1/2028	\$1,189,253	\$62,174	\$38,668	\$16,366	\$1,196	\$1,070,848	\$823,403	\$247,444
13	8/1/2029	\$1,213,452	\$64,040	\$38,282	\$16,857	\$1,232	\$1,093,041	\$845,597	\$247,444
14	8/1/2030	\$1,238,120	\$65,961	\$37,899	\$17,363	\$1,268	\$1,115,629	\$868,184	\$247,444
15	8/1/2031	\$1,263,268	\$67,940	\$37,520	\$17,884	\$1,307	\$1,138,618	\$891,173	\$247,444
16	8/1/2032	\$1,288,903	\$69,978	\$37,145	\$18,421	\$1,346	\$1,162,014	\$914,569	\$247,444
17	8/1/2033	\$1,315,033	\$72,077	\$36,773	\$18,973	\$1,386	\$1,185,823	\$938,379	\$247,444
18	8/1/2034	\$1,341,669	\$74,240	\$36,406	\$19,542	\$1,428	\$1,210,053	\$962,609	\$247,444
19	8/1/2035	\$1,368,817	\$76,467	\$36,042	\$20,129	\$1,471	\$1,234,710	\$987,266	\$247,444
20	8/1/2036	\$1,396,489	\$78,761	\$35,681	\$20,733	\$1,515	\$1,259,800	\$1,012,356	\$247,444
21	8/1/2037	\$1,424,692	\$81,124	\$35,324	\$21,355	\$1,560	\$1,285,330	-	\$1,285,330
22	8/1/2038	\$1,453,437	\$83,557	\$34,971	\$21,995	\$1,607	\$1,311,306	-	\$1,311,306
23	8/1/2039	\$1,482,732	\$86,064	\$34,621	\$22,655	\$1,655	\$1,337,736	-	\$1,337,736
24	8/1/2040	\$1,512,587	\$88,646	\$34,275	\$23,335	\$1,705	\$1,364,627	-	\$1,364,627
25	8/1/2041	\$1,543,012	\$91,305	-	\$24,035	\$1,756	\$1,425,916	-	\$1,425,916
		\$30,553,813	\$1,623,237	\$911,806	\$427,292	\$31,216	\$27,560,261	\$15,886,458	\$11,673,803

25 Year Economics						
Nomin	al Savings	\$11,673,803				
P۱	/ Savings*	\$8,145,289				
ssumed Discount Rate at 2.0	0%					

A