



Second Amendment to Installation Contract

Contract No.: _____

This Second Amendment to Installation Contract (the "Second Amendment") is made as the 7th day of January, 2022, by and between Performance Services, Inc. ("PSI") and Roselle School District 12 ("Owner") with respect to that certain Installation Contract entered into by and between PSI and Owner, dated January 16, 2018, as amended, in the amount of Five Million Two Hundred Sixty Eight Thousand Six Hundred Eleven and 00/100 Dollars (\$5,268,611.00) (the "Installation Contract"). All capitalized terms contained herein and not otherwise defined shall have the meaning ascribed to them in the Installation Contract.

PSI and Owner hereby agree that the Installation Contract shall be amended as follows:

Pursuant to the terms of Section 10 of the Installation Contract, Owner desires to modify the Scope of Work as illustrated on the attached Exhibit "A" (the "Additional Scope of Work") in the amount of One Million Thirty One Thousand Four Hundred and 00/100 Dollars (\$1,031,400.00) (the "Additional Scope of Work Price") and the Performance Guarantee, attached hereto as Exhibit "B". After execution of this Second Amendment, PSI shall be given a reasonable amount of time to commence and complete the performance of the Additional Scope of Work.

All other terms and provisions of the Installation Contract shall remain in full force and effect.

"OWNER":

ROSELLE SCHOOL DISTRICT 12

By: _____
Printed/Title: _____

"PSI":

PERFORMANCE SERVICES, INC.

By: _____
Printed/Title: _____

PERFORMANCE GUARANTEE AGREEMENT

Contract: Guaranteed Energy Savings Contract
Owner: Roselle School District 12
Project: IL Roselle SD 12 PC 02 - 2022, Phase 2
 Roselle Middle School & Spring Hills Elementary School
 500 Park St, Roselle, IL 60172
 560 Pinecroft Dr, Roselle, IL 60172

Qualified Provider:

Company Name:	<u>Performance Services, Inc.</u>
Address:	<u>700 East Butterfield Road, Suite 100</u>
City, State, Zip:	<u>Lombard, Illinois 60148</u>
Representative:	<u>Brian Ondyak, General Manager - Illinois</u>

Performance Guarantee Information:

Total Operational Savings (Years 1-5) =	\$ <u>264,946</u>
Annual Guaranteed Energy Savings Amount =	\$ <u>29,194</u>

Program Term = 20 Years

Guarantee

Pursuant to the terms of this Performance Guarantee Agreement (the "Guarantee"), Qualified Provider guarantees that Owner will annually save the Total Annual Guaranteed Amount during the Program Term.

The Guarantee shall commence once the Energy Conservation Measures ("ECMs") specified in the Contract are installed by the Qualified Provider and accepted by Owner, the Owner's staff has been trained to operate the ECMs, the ECMs have been optimized by the Qualified Provider and the Qualified Provider has received final payment from the Owner.

The date of commencement of the Guarantee (the "Guarantee Commencement Date") shall be established by the Owner and Qualified Provider by their signatures on a Guarantee Commencement Letter.

The Guarantee shall be fulfilled and fully satisfied once the Calculated Savings, as defined below, equal or exceed the Annual Guaranteed Energy Savings Amount multiplied by the Program Term.

Utility Rate

The utility *consumption* information that is used in this Guarantee shall be for the one-year period from December 2018 - November 2019, however the utility *rate* shall be taken from October 2020 to account for the supplier and rate structure change that occurred in February 2020. This configuration allows us to base energy calculations on a twelve (12) month period of consumption prior to covid while also accounting for the correct rate structure.

During the Program Term, the actual twelve (12) month period then occurring and being evaluated shall be referred to as the "Current Year" and the savings calculated during that Current Year shall be referred to as the Current Year Savings. Current Year utility rate data shall be used in calculating the Current Year Savings, provided the Current Year utility rates are not less than Base Year utility rate.

If Current Year utility rates drop below Base Year rates, Base Year rates shall be used to calculate Current Year Savings. Any energy savings generated during the installation phase of this Project shall be added to the Current Year Savings achieved during the first Current Year of the Program Term.

Measurement & Verification

Energy savings will be measured and verified ("M&V") by various methods depending on the ECM (the "Calculated Savings"). Calculated Savings are referred to by the U.S. Department of Energy as "Actual Savings" and shall have the same meaning when referred to herein. The M&V methods are based upon the *U.S. Department of Energy (DOE) M&V Guidelines: Measurement and Verification for Performance-Based Contracts Version 4.0*. The M&V methods to be used in calculating energy savings are defined below and identified for each ECM within this Guarantee and associated Schedules.

DOE Methods of M&V:

Option A – Retrofit Isolation with Key Parameter Measurement (Based on a combination of measured and calculated factors)

Option B – Retrofit Isolation with All Parameter Measurement (Measured and verified with runtimes and utility data)

Option C – Whole Facility Measurement (Analysis of whole facility utility meter or sub-meter data using techniques from simple comparison to regression analysis)

Option D – Calibrated Simulation (Energy use simulation calibrated with hourly or monthly utility billing data and/or end-use metering)

Number of Facilities: 2

Roselle Middle School and Spring Hills Elementary School	
ECM Description	M&V Method
RSD-1: Rooftop PV Solar Array Installation	Stipulated

The Owner shall pay the Qualified Provider the annual Energy Monitoring fees identified below. For these fees, the Provider shall provide an annual report containing Calculated Savings, equipment runtime data (if applicable) and utility data each year within 120 days following the conclusion of each year during the Program Term. Provider will also prepare and deliver to Owner the appropriate annual state reports as required by statute on annual basis.

Electric Savings

Option A - Calculated Electric Savings are based on formulas contained in Schedule A and are considered stipulated for the term of the Guarantee.

Solar PV Savings

A one-time measurement of the AC output of each system shall be combined for the entire Project and compared to the following formula. If the measured AC output for all the Solar PV systems combined does not equal or exceed the guaranteed AC output from the following formula, the Provider will make all modifications required to meet the guaranteed AC output.

$$GO_{AC} = (SI_M / (1000 \text{ W/m}^2)) \times NO_{SUM} \times TC \times PT \times IE \times DC$$

Where:

GO_{AC} =	Guaranteed AC output for all Solar PV systems combined (kW)
SI_M =	Measured solar irradiance (W/m ²)
NO_{SUM} =	Sum of all Solar Panels DC nameplate output (kW)
TC =	Solar panel temperature coefficient based upon the panel temperature at the time of test and solar panel manufacturer data (%)
PT =	Power tolerance coefficient based upon the lowest value of the range published by the solar panel manufacturer (%)
IE =	Inverter efficiency as published by the inverter manufacturer (%)
DC =	Sum of the derating coefficients shown on Schedule B for system losses, including: AC system, wiring, clipping, mismatch, shading, reflection, and soiling losses

Solar PV Savings shall be based on the formulas contained in Schedule A. These Solar PV Savings are considered stipulated savings such that they shall be applied annually to the Annual Guaranteed Energy Savings Amount throughout the Term of the Guarantee. If the solar designs change before the Guarantee Commencement Date, the Provider shall adjust the guaranteed solar savings to match the installed design, per the formulas in Schedule A.

Other Savings & Adjustments

Energy savings resulting from the improvements or recommendations provided as part of the Contract (including physical improvements, operational recommendations, utility rate change recommendations or any other recommendation that reduce energy costs) during the life of the Guarantee that are not accounted for with the calculations identified herein shall be included in total of Calculated Savings. Such energy savings shall be calculated based on industry standard methods.

Increased energy usage resulting from increasing outside air amounts to meet current building codes, additional square footage being added to the building, air-conditioning of areas that were previously not air-conditioned and other identified energy adjustments shall be added to Base Year energy costs in the amounts shown on Schedule A.

Energy savings or losses resulting from Owner modifications and overrides outside the scope of the Guarantee during the Program Term are considered Owner override adjustments and will be reflected in an adjustment to the Base Year. Examples of Owner overrides include unscheduled (undisclosed) physical improvements, plug load changes, changes to occupied schedules, etc.

Operational Savings

Operational Savings exist when an improvement implemented under this program reduces future repair or replacement labor and / or material monies that would have otherwise been expended if the improvement was not implemented. The sale of renewable energy credits (RECs) generated by solar PV projects is also considered Operational Savings. The operational savings are considered Stipulated Savings such that the amounts identified in this Guarantee shall be applied to the guaranteed annual savings amount throughout the term of the Guarantee.

Energy Monitoring

Energy monitoring services shall be performed by the Qualified Provider as described in this Guarantee. Refer to Schedule A for additional details.

The Guarantee is void if the Owner ceases paying the Energy Monitoring Fees identified below. The annual Energy Monitoring Fees shall be paid semi-annually in advance.

Year	Price
1	Included
2	\$2,400
3	\$2,400
4	\$2,400
5	\$2,400
6	\$2,400
7	\$2,400
8	\$2,400
9	\$2,400
10	\$2,400
11	\$2,400
12	\$2,400
13	\$2,400
14	\$2,400
15	\$2,400
16	\$2,400
17	\$2,400
18	\$2,400
19	\$2,400
20	\$2,400

The Owner has the right to request that the Qualified Provider change the scope of this Guarantee at the end of each Current Year to reduce monitoring/reporting labor and its associated costs.

Other Requirements

Owner agrees to maintain the physical plant and all existing equipment/systems affecting energy efficiency such that the condition of the existing equipment/systems during the Program Term of Guarantee is at least equal to the condition at the completion of the Contract. Owner also agrees to properly maintain all new and existing equipment and operate all of the new and existing systems as described in the Qualified Provider's Proposal, Contract and Guarantee.

If the Owner fails to operate the equipment/systems as described herein and such failure results in reduced energy savings, then Calculated Savings shall be adjusted to the benefit of the Qualified Provider to offset lost energy savings caused by such failures by the Owner as described above.

A guarantee bond to insure the faithful performance of the Guarantee is only required for portions of the Annual Guaranteed Energy Savings Amount that are not stipulated savings.

The calculations contained within this Guarantee and any M&V Plan which may be incorporated in the Contract shall be used exclusively in calculating savings over the Program Term. No additional M&V methods shall be used in determining the performance of this Guarantee related to energy or operational savings, unless agreed to in writing by both the Owner and Qualified Provider. By signing below, the Owner and Qualified Provider are fully accepting this Guarantee and all of its provisions, requirements, calculations, amounts and conditions.

Roselle School District 12

Printed Name

Title

Signature

Date

Performance Services, Inc.

Brian Ondyak

Printed Name

General Manager - Illinois

Title

Signature

Date

Solar Energy Savings Calculations - Schedule A

Solar Energy Savings - Consumption Savings

Buildings	Total Annual Solar Generation (kWh)	Electric Consumption Rate (\$/kWh)	Total Electric Consumption Savings
Roselle Middle School and Spring Hills Elementary School	352,504	RMS - 0.046 SHES - 0.042	\$ 15,485

Notes:

1. Electric consumption rate based on analysis of utility bills from Dec 2018 through Oct 2020.
2. Annual solar kWh generation based on the attached production model prepared in Helioscope Software, by Folsom Labs, which is generally accepted in the industry to estimate solar production.

Solar Energy Savings - Demand Savings

Building	Total Annual Solar Demand Reduction (kW)	Electric Demand Rate (\$/kW)	Total Electric Demand Savings
Roselle Middle School and Spring Hills Elementary School	429	7.37	\$ 3,158

Notes:

1. Electric demand rate based on analysis of utility bills from Dec 2018 through Oct 2020.
2. Annual solar demand reduction based on analysis of building interval data compared to interval data of solar PV generation, provided by the model prepared in Helioscope Software, by Folsom Labs, which is generally accepted in the industry to estimate solar production.

Solar Energy Savings - Capacity and Transmission Savings

Building	Annual Existing Capacity & Transmission Costs	Percentage Capacity and Transmission Savings due to Solar	Total Electric Capacity & Transmission Savings
Roselle Middle School and Spring Hills Elementary School	\$ 23,557	50.0%	\$ 10,551

Notes:

1. Annual existing capacity and transmission costs based on analysis of utility bills from Dec 2018 through Oct 2020.
2. The percentage capacity and transmission savings due to solar is based on the assumption that the solar PV system will be at 50% power output at PJM coincident peaks (other than months where 50% output is greater than current peak).
3. Electric Capacity & Transmission Savings is expected to occur in the second and subsequent years of solar PV operation (and not the first year) due to timing considerations for when PLC is measured and billed by PJM and Electricity Supplier.

Solar Energy Savings - Total Annual Savings

\$ 29,194

Notes:

1. The Base Year utility rates and Annual Existing Capacity and Transmission Costs identified in this Schedule A are assumed and stipulated to increase 3.5% each year for the duration of the guarantee term.

Solar Operational Savings Calculations - Schedule A				
Building	Solar PV Size (kWac)	REC Quantity over 15 Years	REC Price	Total REC Contract Value
Roselle Middle School and Spring Hills Elementary School	233	RMS - 2155 SHES - 2874	RMS - \$58.84 SHES - \$48.06	\$ 264,946
<u>REC Contract Payment Schedule</u>				
Year 1	\$	52,989		
Year 2	\$	52,989		
Year 3	\$	52,989		
Year 4	\$	52,989		
Year 5	\$	52,989		

Notes:

1. REC Price based on the IPA Program Guidebook Updated December 10, 2021 to reflect new requirements from Public Act 102-0662.
2. REC Contract Payment Schedule based on the terms of the Illinois Power Agency Adjustable Block Program.

SOLAR PROJECT - SUMMARY

Solar PV Project Sites:

Rooftop Solar Arrays - Spring Hills Elementary and Roselle Middle Schools

Combined Solar PV System Summary

Solar PV kWdc System Size:	303.6 kWdc
Solar PV kWac System Size:	233.1 kWac
PV System Type:	Roof
PV System Annual Generation:	352,504 kWh
Bldg Annual Elec Usage:	588,177 kWh
Bldg Elec kWh Offset by Solar:	60%

Combined Project Financial Summary

PSI Project Cost:	\$ 1,031,400
ComEd Rebate:	\$ 75,908
Estimated Total REC Incentive:	\$ 264,946
Gross Savings in Year 1:	\$ 147,540
Gross Savings over 20 Years:	\$ 1,119,017
Gross Savings over 30 Years:	\$ 1,741,376

Notes:

1. Assumes net metering across both meters at SHES.
2. REC Income is contingent upon future REC prices, availability, and approval in the IPA Adjustable Block Program
3. Rebate value is estimated based on 2021 values and is subject to change.
4. Final solar array is contingent upon roof condition, ROE approval, village approval, and county approval.



SOLAR PROJECT - CASH FLOW

Solar PV Project Sites: Rooftop Solar Arrays - Spring Hills Elementary and Roselle Middle Schools

Assumptions

Annual Solar Degradation:	0.50%
Electric Consumption Rate (\$/kWh) - RMS:	\$ 0.046
Electric Consumption Rate (\$/kWh) - SHES:	\$ 0.042
Electric Demand Rate (\$/kW) - RMS:	\$ 7.37
Electric Demand Rate (\$/kW) - SHES:	\$ 7.37
Annual Rate Escalation:	3.5%
Solar Capacity % at PJM Coincident Peak:	50%

Year	Solar kWh Generation	Utility Cost - Before Project	Utility Cost - After Project	Utility Cost Savings	Estimated Rebate	Estimated REC Income	Annual Gross Savings	Cumulative Gross Savings
1	352,504	\$ (65,661)	\$ (47,018)	\$ 18,644	\$ 75,908	\$ 52,989	\$ 147,540	\$ 147,540
2	350,742	\$ (67,960)	\$ (38,209)	\$ 29,751	\$ -	\$ 52,989	\$ 82,740	\$ 230,280
3	348,988	\$ (70,338)	\$ (39,646)	\$ 30,693	\$ -	\$ 52,989	\$ 83,682	\$ 313,962
4	347,243	\$ (72,800)	\$ (41,136)	\$ 31,664	\$ -	\$ 52,989	\$ 84,654	\$ 398,615
5	345,507	\$ (75,348)	\$ (42,681)	\$ 32,667	\$ -	\$ 52,989	\$ 85,656	\$ 484,272
6	343,779	\$ (77,985)	\$ (44,283)	\$ 33,702	\$ -	\$ -	\$ 33,702	\$ 517,974
7	342,061	\$ (80,715)	\$ (45,945)	\$ 34,770	\$ -	\$ -	\$ 34,770	\$ 552,744
8	340,350	\$ (83,540)	\$ (47,668)	\$ 35,872	\$ -	\$ -	\$ 35,872	\$ 588,616
9	338,649	\$ (86,464)	\$ (49,455)	\$ 37,009	\$ -	\$ -	\$ 37,009	\$ 625,624
10	336,955	\$ (89,490)	\$ (51,308)	\$ 38,182	\$ -	\$ -	\$ 38,182	\$ 663,807
11	335,271	\$ (92,622)	\$ (53,229)	\$ 39,393	\$ -	\$ -	\$ 39,393	\$ 703,199
12	333,594	\$ (95,864)	\$ (55,222)	\$ 40,642	\$ -	\$ -	\$ 40,642	\$ 743,841
13	331,926	\$ (99,219)	\$ (57,288)	\$ 41,931	\$ -	\$ -	\$ 41,931	\$ 785,773
14	330,267	\$ (102,692)	\$ (59,430)	\$ 43,262	\$ -	\$ -	\$ 43,262	\$ 829,034
15	328,615	\$ (106,286)	\$ (61,651)	\$ 44,634	\$ -	\$ -	\$ 44,634	\$ 873,669
16	326,972	\$ (110,006)	\$ (63,955)	\$ 46,051	\$ -	\$ -	\$ 46,051	\$ 919,720
17	325,337	\$ (113,856)	\$ (66,343)	\$ 47,513	\$ -	\$ -	\$ 47,513	\$ 967,232
18	323,711	\$ (117,841)	\$ (68,820)	\$ 49,021	\$ -	\$ -	\$ 49,021	\$ 1,016,254
19	322,092	\$ (121,965)	\$ (71,387)	\$ 50,578	\$ -	\$ -	\$ 50,578	\$ 1,066,832
20	320,482	\$ (126,234)	\$ (74,050)	\$ 52,185	\$ -	\$ -	\$ 52,185	\$ 1,119,017
21	318,879	\$ (130,652)	\$ (76,810)	\$ 53,842	\$ -	\$ -	\$ 53,842	\$ 1,172,859
22	317,285	\$ (135,225)	\$ (79,672)	\$ 55,553	\$ -	\$ -	\$ 55,553	\$ 1,228,412
23	315,698	\$ (139,958)	\$ (82,639)	\$ 57,319	\$ -	\$ -	\$ 57,319	\$ 1,285,731
24	314,120	\$ (144,857)	\$ (85,716)	\$ 59,141	\$ -	\$ -	\$ 59,141	\$ 1,344,872
25	312,549	\$ (149,927)	\$ (88,906)	\$ 61,021	\$ -	\$ -	\$ 61,021	\$ 1,405,893
26	310,987	\$ (155,174)	\$ (92,213)	\$ 62,961	\$ -	\$ -	\$ 62,961	\$ 1,468,854
27	309,432	\$ (160,605)	\$ (95,641)	\$ 64,964	\$ -	\$ -	\$ 64,964	\$ 1,533,818
28	307,884	\$ (166,226)	\$ (99,196)	\$ 67,031	\$ -	\$ -	\$ 67,031	\$ 1,600,849
29	306,345	\$ (172,044)	\$ (102,881)	\$ 69,163	\$ -	\$ -	\$ 69,163	\$ 1,670,012
30	304,813	\$ (178,066)	\$ (106,702)	\$ 71,364	\$ -	\$ -	\$ 71,364	\$ 1,741,376
TOTAL	9,843,037	\$ (3,389,619)	\$ (1,989,096)	\$ 1,400,523	\$ 75,908	\$ 264,946	\$ 1,741,376	

Note: Values above are totals for both arrays combined.



Roselle School District 12

Improvement List

December 14, 2021



Scope Item	Improvement Summary	Total Cost	Estimated Rebate	Estimated REC Income	Cumulative Energy Savings (30 Years)
Roselle Middle School and Spring Hills Elementary School					
RSD-1	Rooftop PV Solar Array Installation	\$1,031,400	\$75,908	\$264,946	\$1,400,523
	<ul style="list-style-type: none">* Install new 128 kWdc / 99.9 kWac roof-mount solar PV system at Roselle Middle School* Install new 176 kWdc / 133.2 kWac roof-mount solar PV system at Spring Hills Elementary School* Install solar panels, racking, inverters, and electrical wiring for a complete and operational system* Tie in solar array systems to building electrical systems.* Provide NEED renewable energy curriculum for implementation by district administration				
Total for Roselle Middle School and Spring Hills Elementary School		\$1,031,400	\$75,908	\$264,946	\$1,400,523
TOTAL FOR ALL IMPROVEMENTS		\$1,031,400	\$75,908	\$264,946	\$1,400,523
NOTES: 1. The total costs shown include all fees and are before any applicable rebates. 2. Final project, system size, RECs, and costs are contingent upon final Village approval, ROE approval, Interconnection approval and owner signed interconnection agreement with ComEd 3. REC Income is contingent on obtaining agreements to sell RECs generated by the roof-mounted arrays. 4. Pricing is valid for construction in 2022. If construction is delayed, prices may increase. 5. Utility rebates are estimates based on the program currently available from the district's utility companies. These programs and thus the amount of the rebate are subject to change. 6. Energy savings assume net metering across both meters at Spring Hills Elementary School					