

**SOUTH SAN JOAQUIN  
IRRIGATION DISTRICT**

# **REQUEST FOR PROPOSAL**

**FOR**

**RENEWABLE ENERGY ENGINEERING SERVICES: REPOWERING  
AN EXISTING 1.6-MEGAWATT SOLAR FARM**

**Issued: July 26, 2023**  
**Proposals Due: August 17, 2023**

**REQUEST FOR PROPOSAL  
FOR  
RENEWABLE ENERGY ENGINEERING SERVICES: REPOWERING AN EXISTING 1.6-MEGAWATT  
SOLAR FARM**

**Table of Contents**

Section 1 – Notice Regarding the California Public Records Act.....4

Section 2 – Notice Calling for Proposals.....4

Section 3 – Project Description.....4

    3.1 Background.....4

    3.2 Purpose.....5

Section 4 – Instructions to Respondents.....6

    4.1 District Representatives.....6

    4.2 Submission of Proposal.....6

    4.3 Late Proposals.....7

    4.4 Withdrawal of Proposals.....7

    4.5 Scope of Work & Deliverables.....7

    4.6 Timing of Project.....8

    4.7 Consultant Qualifications.....8

    4.8 Insurance Requirements.....9

Section 5 – Requirements for Proposal Contents.....9

    5.1 Firm/Consultant and Sub-consultant Information.....9

    5.2 Proposal.....10

    5.3 Mandatory Forms/Certification.....11

Section 6 – Selection Criteria.....11

Section 7 – Sample Professional Services Agreement.....11

Section 8 – Questions Regarding This RFP.....12

Section 9 – List of Exhibits & Attachments.....12

    Exhibit A – Statement of No Conflict of Interest.....12

    Exhibit B – Certification Form.....12

    Exhibit C – Sample Professional Services Agreement.....12

    Exhibit D – Generation and Load Data.....12

## **Section 1 – Notice Regarding the California Public Records Act**

Government Code Sections 6250 et seq., the California Public Records Act, defines a public record as “any writing containing information relating to the conduct of the public business.” The Public Records Act provides that public records shall be disclosed upon written request and that any citizen has a right to inspect any public record unless the document is exempted from disclosure. Be advised that any contract that eventually arises from this Request for Proposal is a public record in its entirety. Also, all information submitted in response to this Request for Proposal is itself a public record without exception. Submission of any materials in response to this Request for Proposal constitutes a waiver by the submitting party of any claim that the information is protected from disclosure. By submitting materials: (1) you are consenting to release of such materials by South San Joaquin Irrigation District (“District”) if requested under the Public Records Act without further notice to you; and (2) you agree to indemnify and hold District harmless for release of such information.

## **Section 2 – Notice Calling for Proposals**

The South San Joaquin Irrigation District (“District” or “SSJID”) is soliciting proposals from qualified electrical engineering consulting firms, developers, and individuals. The purpose of this Request for Proposal (RFP) is to select a qualified consultant to provide electrical engineering services to develop plans, and provide engineering services during construction, for the repowering of an existing 1.6 Megawatt solar farm.

## **Section 3 – Project Description**

### **3.1 Background**

The South San Joaquin Irrigation District, established in 1909, provides irrigation water for agricultural use in the rural areas surrounding Escalon, Manteca, and Ripon. SSJID is a very innovative, professional, and integral irrigation district in the sunny Central Valley of California. In 2005, SSJID completed construction and initiated operation of the Nick C. DeGroot Water Treatment Plant (WTP), providing potable water to partner cities in the region.

In 2008, SSJID installed the 1.6-megawatt (MW) Robert O. Schulz Solar Farm (Solar Farm) at the WTP served electrically by PG&E. The Solar Farm has two sections (PV1 and PV2). PV1 was completed in 2008 and consists of 175-watt monocrystalline panels (6,720 total) with a nameplate capacity of 1.176 MW and operates just under 1 MW. PV2, completed in 2009, consists of 72.5-watt thin film solar panels (5,760 total) with a nameplate capacity of .418 MW and operates at .378 MW. Both sections of the Solar Farm (PV1 and PV2) operate on articulating, solar-tracking mounts.

The Solar Farm production and reliability has deteriorated through the years, due to age, obsolete parts, and faster than expected generation degradation in some of the solar modules. SSJID has acquired the equipment to repower the Solar Farm, including inverters and modules, and is seeking consulting services to assist with development of a preferred plan to implement the repowering effort.

SSJID completed a Net Energy Metering (NEM2) agreement with PG&E in 2022. It is expected that the NEM2 rate advantages will transition as new Net Billing Tariff (NBT) rates change in May 2029, which likely will continue to encourage load shifting with battery storage technologies. The WTP and Solar Farm are currently on PG&E's B-6 electric rate schedule.

The production of the Solar Farm currently fulfills roughly 70% of the energy usage of the WTP in the six sunniest summer months. With new solar inverters, modules, and a 10% increase in generating capacity of the Solar Farm, the production is expected to reach greater than 90% of the current WTP energy usage during those same six months. (See **Exhibit "D"** for tabular and graphical information – for the winter six-month period, the before and after production to WTP load percentages are roughly 25% and 45% respectively.) Recent time-of-use data for the Solar Farm and the WTP may be available from PG&E, if necessary. SSJID can provide this data upon request.

The existing articulating mounts for the Solar Farm are galvanized steel, in good condition, and may be reused to support replacement solar modules.

### 3.2 Purpose

The South San Joaquin Irrigation District ("District" or "SSJID") is seeking Proposals from qualified consulting firms, developers, or individuals to develop a plan for repowering the existing Solar Farm, thereby increasing the use of renewable energy for the WTP and lowering energy costs.

SSJID is also interested in innovative solutions such as upsizing the existing solar farm beyond the 10% capacity, and adding other renewable components, such as battery storage, that may enhance the operation of the solar farm to offset energy consumption by the WTP.

## Section 4 – Instructions to Respondents

---

### 4.1 District Representatives

There are a total of 12 pages in this Request for Proposal. If any pages are missing, please notify SSJID and request any missing page(s) by emailing:

Bill Schwandt, Electric Utility Manager, at [wschwandt@ssjid.com](mailto:wschwandt@ssjid.com)

Any questions regarding the meaning or interpretation of this Request for Proposal, or any part thereof, must be made in writing and submitted by e-mail no later than **Friday August 4, 2023, by 3:00 P.M.** Any interpretation or clarification made will be in the form of a written addendum to this Request for Proposal and will be furnished to all prospective Respondents. Oral explanations or instructions are not binding.

### 4.2 Submission of Proposal

Proposals will be accepted until **3:00 p.m., Pacific Time, on Thursday, August 17, 2023.** Interested firms shall submit by mail or email:

South San Joaquin Irrigation District                      or                      [wschwandt@ssjid.com](mailto:wschwandt@ssjid.com)  
Attn: Bill Schwandt  
11011 E. Highway 120  
Manteca, CA 95336

The email or the outside of the envelope or package must bear the title:

#### **SSJID RENEWABLE ENERGY ENGINEERING SERVICES REQUEST FOR PROPOSAL**

If applicable, Respondents shall include acknowledgement of all addenda received by signing and including each document as an attachment to the Proposal.

Submitted proposals will become the property of SSJID and will not be returned. By submitting a Proposal, the Respondent acknowledges that SSJID is a public agency, and as such, is subject to the California Public Records Act, (Government Code sections 6250 et seq.) and the Ralph M. Brown Act (Government Code sections 54950 et seq.) that may require disclosure of some proprietary information.

SSJID is required to publicly disclose all proposal information and materials submitted under this Request for Proposals to third parties, if requested. Disclosure will only occur once the Project has been officially deemed awarded or in the event of a non-award. If Respondent so chooses, Respondent may clearly mark certain pages individually “proprietary.” In the case of a challenge to the “proprietary” status of these certain pages, District will notify Respondent so that Respondent may defend this “proprietary” status. Respondents recognize and agree that SSJID will not be responsible for, or liable in any way for, any losses that the Respondent may suffer from the disclosure of information or materials to third parties.

SSJID will not compensate Respondents for the preparations of proposals. SSJID reserves the right to waive informalities in the Proposals received. Nothing in this RFP shall obligate SSJID to enter into a contract or award the project.

#### 4.3 Late Proposals

Proposals and modifications thereof received after the stated deadline will not be considered and will be returned to Respondent unopened.

#### 4.4 Withdrawal of Proposals

Unless otherwise specified, a proposal may be withdrawn by written request from Respondent at any time prior to the time and date set for receipt of Proposals.

#### 4.5 Scope of Work & Deliverables

The Scope of Work below describes SSJID staff assumptions for minimum necessary project components for successful completion of the proposed work. Respondents may propose additional project scope based on their experience with successful completion of this type of work.

1. **Background information review.** SSJID will provide all existing drawings and specifications for the Solar Farm equipment, replacement equipment, and all related information including Interconnection Agreement, historical generation information and WTP demand data.  
**Deliverable:** Summary technical memorandum and electronic archive of all records.
2. **Repowering alternatives analysis.** Respondents shall evaluate alternatives for repowering the solar farm. SSJID staff has identified several options for evaluation:
  - a. Repowering of the existing solar farm, PV1 and PV2, including removal of existing modules and inverters, and replacement and upscaling with SSJID supplied equipment to 10% above current Solar Farm capacity.
  - b. This analysis may also explore other renewable energy options such as additional solar capacity, battery storage, and/or other renewable energy project components that would be advantageous to SSJID. Should other alternatives be evaluated, such alternatives must fully describe assumptions such as ownership options, pricing structures, terms of agreement, energy and/or energy storage price, warranties; and responsibilities for operations and maintenance, and updating of specified equipment for the life of the proposed equipment to comply with industry and/or state specific standards.  
  
**Deliverable:** Memorandum discussing repowering options, assumptions, costs, and economic analyses for comparison.
3. **Plans and specifications for construction.** Upon determination of a preferred alternative, Respondent will develop plans and specifications for the replacement of inverters and solar

panels and propose a construction schedule for such improvements. Plans should consider the phasing of such improvements over an extended period, while portions of the solar farm remain operational, if feasible. Construction documents should also contemplate using SSJID or outside contractor labor for project implementation. In all cases, the project will include connecting the new equipment to an existing Supervisory Control and Data Acquisition (SCADA) system.

**Deliverable:** Plans and specifications for construction.

4. **Operations and maintenance manual.** Respondents will catalog all specifications for the equipment used to repower the solar farm and recommend best practices for maintaining all systems of the Solar Farm, including electrical, structural, and tracking systems.

**Deliverable:** Operations and maintenance manual for the final project.

5. **Optional Scope: Bidding and Engineering Services During Construction:** Depending on performance in the scope of the design phase of the project, upon mutual agreement of both District and Respondent, Respondent may provide bidding services, and/or engineering services during the construction of the project. Such services may include bid administration, and include periodic inspection of repowering work, responding to requests for information, and developing as-built plans to be delivered after the repowering effort is complete.

**Deliverable:** Bid administration, responses to requests for information, inspections, as-built construction plans.

#### 4.6 Timing of Project

The District is interested in moving forward with the repowering effort as quickly as possible. District staff is proposing an illustrative schedule below, based on the Districts' interests in implementing the project. The District will not require that Respondents meet such a schedule. Respondents should propose a schedule for implementation of the scope of work based on Respondents experience and available resources.

1. Reports and recommendations on innovative renewable energy options such as adding battery storage, additional solar energy projects, etc. that are beneficial to SSJID – completion by October 15, 2023.
2. Repowering Electrical Engineering and Construction Drawings, completed by November 15, 2023.
3. Delivery of as-built electrical and construction drawings following construction, operating and maintenance instructions – completion by May 31, 2024.
4. Upon completion of each phase of the project, a report with an analysis and compilation of the data gathered along with the observations found, a conclusion of the findings, and recommendations. The reports shall also reference data obtained in the field and, if applicable, operating data from the Supervisory Control and Data Acquisition (SCADA) system of the Solar Farm. (1 each electronic copy and 1 each hard copy)

#### 4.7 Consultant Qualifications

The consultant is required to be a current Licensed Solar Developer or Licensed Professional Electrical Engineer in the State of California.

#### 4.8 Insurance Requirements

Responding Consultant or firm must have the ability secure, at its own expense, insurance coverage and provide proof of a Certificate of Insurance in the following minimum amounts:

1. Commercial General Liability (CGL): Insurance Services Office Form CG 00 01 covering CGL on an “occurrence” basis, including products and completed operations, property damage, bodily injury, and personal & advertising injury with limits no less than \$2,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 05 09 or 25 04 05 09) or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability: ISO Form Number CA 00 01 covering any auto (Code 1), or if Consultant has no owned autos, covering hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$1,000,000 per accident for bodily injury and property damage.
3. Workers’ Compensation: as required by the State of California, with Statutory Limits, and Employer’s Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
4. Professional Liability (Errors and Omissions): Insurance appropriate to Consultant’s profession, with limit no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate.  
District shall be named as an Additional Insured and provide endorsements regarding the same for all liability insurance coverage. Proof of insurance and required endorsements must be provided before commencement of work.

For specific Insurance requirements, please see the attached Professional Services Agreement (**Exhibit “C”**).

### Section 5 – Requirements for Proposal Contents

Proposals shall contain the following information and items (“Proposal Package”), and be organized as follows:

#### 5.1 Firm/Consultant and Sub-consultant Information

1. General Information. A Cover Letter or general introduction including the Consultant or firm name, address, telephone number, fax number, and e-mail address of the person or persons authorized to represent the Consultant regarding all matters related to the submitted Proposal.
2. Relevant Expertise and Experience. A summary of Consultant’s qualifications and experience in providing the services requested.

- a. Detailed information regarding at least two (2) similar, successfully completed projects performed within the last five (5) years, including the project name; the client or entity; date completed; features or aspects of the project that are comparable to the present Project Work contemplated herein; and the name, title, and contact information of individual who can be contacted to verify project information provided.
  - b. Demonstration or explanation of adequacy of Consultant's staff and other resources necessary for completing the Project in a timely and efficient manner.
3. Identification and Qualifications of Lead Consultant/Project Manager, Key Personnel, Staff Members.
- a. Identify Lead Consultant/Project Manager, key personnel, and staff members who will be assigned to Project;
  - b. Explain what responsibilities or roles will be assigned to each;
  - c. Provide information regarding the education, experience, or expertise of each individual, indicating their ability to perform the Work (a résumé or curricula vitae is acceptable), and including all professional registration certification and/or license designations and numbers currently active in the State of California for those individuals identified.
4. Identification and Qualifications of Proposed Sub-consultants. Provide a list of sub-consultant or sub-consultant services intended to be used by Consultant in carrying out the Work, including the names, California license or registration numbers (if applicable), address, phone number, e-mail address, and length of time the sub-consultant(s) has/have been associated with Consultant.
5. Billing Rates. Provide a listing of the hourly rates for all personnel or categories of employees, the flat or hourly rates for specific services, as well as any overhead or special charges and sub-consultant fees or services that may be needed.

## 5.2 Proposal

1. Consultant shall submit a "Work Plan," outlining its proposed methods, general approach, and strategies in carrying out the Scope of Work and completing the Deliverables.
2. Consultant shall propose an estimated timeline or duration needed to complete each of the activities set for the in the Scope of Work and completing the Deliverables, including an overall target completion date or maximum number of days to complete the Project.
3. Consultant shall identify any resources, information and/or data it needs from SSJID to perform the Project Work.

4. Consultant shall propose a total “not to exceed” fee for all of the services and Work contemplated for the Project associated with this RFP. Consultant’s proposed fee should include and account for the direct labor, fringe benefits, insurance, overhead, mobilization and travel, and all other expenses Consultant anticipates incurring in completing the Project.

### 5.3 Mandatory Forms/Certification

Consultant shall include the following completed forms as part of the submitted “Proposal Package:”

- Statement of No Conflict of Interest (Attached as Exhibit “A”)
- Certification Form (Attached as Exhibit “B”) The primary objective of SSJID is to select a qualified firm to perform necessary services for SSJID at a fair and reasonable fee. To that end, District has established the following criteria for the selection process:

## Section 6 – Selection Criteria

Evaluation and selection of Consultant will be based upon consideration the following criteria, at a minimum:

- Timeliness and Completeness of Proposal. Consultant’s Proposal Package must be received by the posted Deadline. Proposals will be evaluated based on organization, clarity, completeness, and responsiveness to the requirements contained in the RFP.
- Technical Qualifications and Experience. Education, training, experience, and requisite credentials; demonstrated experience with like consulting projects; work quality, timely completion and general performance on previous projects and verification by provided references.
- Approach to Project Work. Including, but not limited to: Approach to completing Project Work, projected timeline, analysis, and study methodologies.
- Projected Project Price (“Not to Exceed”) and Cost Control Measures. Quoted Project “not to exceed” price, as well as demonstration of adequate resources and personnel to complete Project Work.

The above list of criteria is not exhaustive and is not in order of weight or bearing on evaluation. District reserves the right to consider other criteria pertinent to selecting Consultant.

## Section 7 – Sample Professional Services Agreement

Upon final award of the Contract for the Project, Consultant will be required to enter into a “Professional Services Agreement” in the form of the sample attached hereto as **Exhibit “C**.

## **Section 8 – Questions Regarding This RFP**

Questions regarding this RFP shall be directed to William (Bill) Schwandt P.E. MBA, Electrical Utility Manager, at [wswandt@ssjid.com](mailto:wswandt@ssjid.com) or (209) 629-9791.

Questions resulting in clarification of any portion of the RFP or other substantive matter regarding the Project will result in issuance of an Addendum to this RFP.

## **Section 9 – List of Exhibits & Attachments**

Exhibit A – Statement of No Conflict of Interest

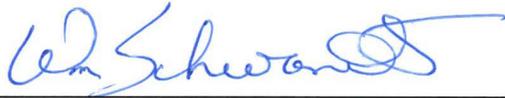
Exhibit B – One-Line Diagram (Note: Limited drawings are available upon request)

Exhibit C – Sample Professional Services Agreement, including Certification Form

Exhibit D – Generation and Load Data, Site Plan, and Product Information

Dated: 7-26-2023

South San Joaquin Irrigation District



---

William (Bill) Schwandt, P.E. MBA  
Electric Utility Manger

# **Exhibit A.**

**Statement of No Conflict of Interest**

## NON-CONFLICT OF INTEREST STATEMENT

CHECK ONE:

To the best of our knowledge, the undersigned firm has no potential conflict of interest due to any other clients, contracts, or property interest for this project.

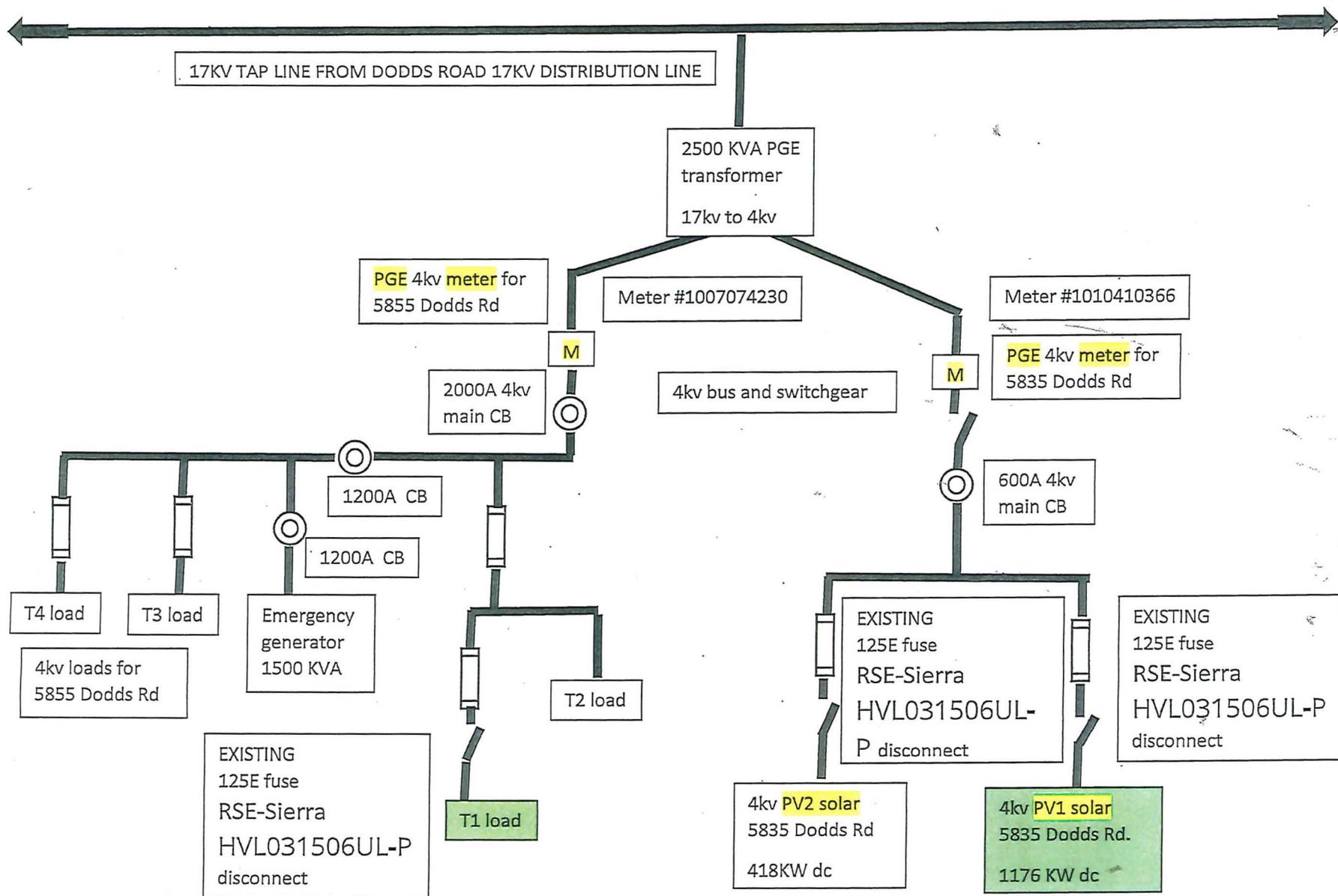
OR

The undersigned firm, by attachment to this form, submits information which may be a potential conflict of interest due to other clients, contracts, or property interests for this project.

# Exhibit B.

One-Line Diagram

(Note: Limited engineering drawings are available upon request)



**PROPOSED SSJID customer owned 17kv to 4kv substation.  
Serves 5835 Dodds Road and 5855 Dodds Road.**

# **Exhibit C.**

**Sample Professional Services Agreement, including Certification Form**

## PROFESSIONAL SERVICES AGREEMENT

**THIS PROFESSIONAL SERVICES AGREEMENT** ("Agreement") is effective as of \_\_\_\_\_, 2022 (the "Effective Date") by and between the **South San Joaquin Irrigation District**, an irrigation district governed by the provisions of Division 11 of the California Water Code (collectively, "Client"); and \_\_\_\_\_, ("Consultant").

In consideration of the promises herein and for other good and valuable consideration, the parties hereto agree as follows:

- 1. Services:** Client and Consultant agree Consultant will perform the following general services: \_\_\_\_\_

Services to be provided by Consultant and other work to be performed by Consultant ("Work") are specifically described in the Scope of Work attached hereto as **Exhibit A**, which is incorporated herein by this reference.

Consultant's key personnel assigned to, and who shall be primarily responsible for carrying out the Work, are as follows:

Name	Labor Classification	Project Role

Consultant may replace, substitute, reassign, or remove key personnel from the Work by written approval of Client. However, where key personnel are unable to perform the Work due to absence, leave, or termination of employment, Client approval shall not be required but Consultant shall notify Client of the change.

- 2. Term of Agreement.** This Agreement shall be effective immediately and shall remain in effect unless amended pursuant to Section 18 or terminated pursuant to Section 19 herein.
- 3. Schedule for Performance.** Consultant shall perform the Work as expeditiously as is consistent with generally accepted standards of professional skill and care and the orderly progress of work.
- 4. Compensation and Price Ceiling.** The compensation to be paid by Client to Consultant for the Work shall be on a time and materials basis in accordance with the Rate and Fee Schedule attached hereto as **Exhibit B**. The Rate and Fee Schedule shall be effective for the duration of performance of the Work, unless otherwise negotiated by the parties, approved by Client's Board of Directors, and consented to in writing by Client as an amendment to this Agreement.

Total compensation to Consultant for Work performed under this Agreement, including fees and expenses, shall not exceed the total price ceiling of \_\_\_\_\_ Dollars (\$\_\_\_\_\_).

**5. Invoicing and Payment.** Consultant shall submit periodic invoices, not more frequently than monthly, for the services rendered during the preceding period. All invoices are to be sent to the Client's Accounts Payable department with the project name listed on the invoice, and must indicate the hours actually worked by each classification as well as all other directly-related costs. Client shall approve or disapprove said invoice within ten (10) days following receipt thereof, and shall pay, within thirty (30) days' approval, all approved invoices. Client reserves the right to withhold payment of disputed specific items and shall give notice to the Consultant, pursuant to Section 7 herein, of all such disputed specific items within ten (10) days following receipt of billing or invoices. The parties shall exercise good faith and diligence in the resolution of any disputed invoiced amounts.

**6. Notices.** Any notices or other communications to be given to any party pursuant to this Agreement shall be given by delivering same in writing to the parties at the addresses set forth below:

**"CLIENT"**

South San Joaquin Irrigation District  
P.O. Box 747  
Ripon, California 95366-0747  
Attn: Peter M. Rietkerk, General Manager  
Telephone: (209) 249-4600  
Facsimile: (209) 249-4688

**"CONSULTANT"**

[Redacted]  
[Redacted]  
[Redacted]  
Attn: [Redacted]  
Telephone: [Redacted]  
Facsimile: [Redacted]

Notice shall be deemed given when deposited into the United States mail, postage prepaid, addressed to the parties at the addresses above. Nothing shall preclude the giving of personal notice or notice by e-mail or facsimile machine provided, however, that notice by e-mail or facsimile machine shall be followed by notice deposited into the United States mail as set forth above.

**7. Independent Contractor:** It is understood and agreed that Consultant is an independent contractor and nothing in this Agreement should be construed to create a partnership, joint venture, or employer-employee relationship:

- a. Consultant, in the performance of its obligations under this Agreement, is subject to the control or direction of Client as to the designation of tasks to be performed, and the work to be accomplished but not the means, methods or sequence used by Consultant for accomplishing the work. Client shall have the right to guide the Consultant's work efforts, but not direct the results nor the manner or the means by which the work is performed.
- b. If, in the performance of this Agreement, any third persons are employed by Consultant, such persons shall be entirely and exclusively under the direction, supervision, and control of Consultant. All terms of employment, including hours, wages, working conditions, discipline, hiring, and discharging, or any other terms of employment or requirements of law, shall be determined by Consultant.
- c. Consultant and Consultant's employees are not authorized to act as agent for, or make any representation, contract, or commitment on behalf of Client.
- d. Consultant shall not be entitled to any benefits payable to employees of Client.
- e. Client will not make any deductions or withholdings from the compensation payable to Consultant under this Agreement, and will not withhold or make payments for

social security; make unemployment insurance or disability insurance contributions; or obtain worker's compensation insurance on Consultant's behalf.

- f. Consultant will be solely responsible for all tax returns and payments required to be filed with or made to any federal, state or local tax authority with respect to Consultant's performance of services and receipt of fees under this Agreement. Consultant agrees to accept exclusive liability for complying with all applicable state and federal laws governing self-employed individuals, including obligations such as payment of taxes, social security, disability and other contributions based on fees paid to Consultant, its agents or employees under this Agreement. Consultant hereby agrees to indemnify and defend Client against any and all such taxes or contributions, including penalties and interest.
- g. Consultant hereby indemnifies and holds Client harmless from any and all claims that may be made against Client based upon any contention by any third party that an employer-employee relationship exists by reason of this Agreement.

**8. Authority of Consultant.** It is understood that Consultant is to provide information, research, advice, recommendations and consulting services to Client. Consultant shall not possess any authority with respect to any decision of Client. Client is responsible for, and shall make all policy decisions related to, the Work performed by Consultant.

**9. Potential Conflicts of Interest.**

- a. Consultant shall disclose its involvement in any projects which may be directly affected by actions taken by Client based on the services provided hereunder. Consultant shall not write a proprietary specification for material, equipment, or service from companies in which it holds a beneficial interest.
- b. Consultant certifies that it has disclosed to Client any actual, apparent or potential conflicts of interest that may exist relative to the services to be provided pursuant to this Agreement. Consultant hereby agrees to advise Client in writing of any actual, apparent, or potential conflicts of interest that may develop subsequent to the date of execution of this Agreement and shall give such notice pursuant to Section 7 herein, within ten (10) days of Consultant's knowledge of such conflict. District reserves the right to require Consultant to submit a financial disclosure statement.
- c. Consultant agrees to refrain from other engagements that may present an actual, apparent or potential conflict of interest with respect to the work covered by this Agreement. Consultant may request a waiver of these requirements from District. The request for a waiver must be in writing and shall contain a disclosure and description of the actual, apparent or potential conflict of interest and Consultant's reasons and justification for requesting such a waiver. The request shall be submitted to District pursuant to Section 7 of this Agreement.

**10. Ownership of Work Product.** All technical data, evaluations, plans, specifications, maps, drawings, images, reports or other work product of Consultant prepared pursuant to this Agreement constitute work made for hire ("Work Product").

- a. All Work Product shall be delivered to Client upon completion of the services authorized hereunder, and shall become, the property of Client, and Client shall be the copyright holder thereof. Client shall have the right to make and retain copies and use all Work Product; provided, however, the use shall be limited to the intended use for which the services and Work Products are provided under this Agreement. Client agrees to indemnify and hold Consultant harmless if Work Product is used for other than its original intended purpose.

- b. Consultant retains no rights to use the Work Product and agrees not to challenge the validity of Client's rights or ownership in the Work Product. Consultant may retain copies of the Work Product for its files and internal use. Consultant's publication or release of any or all of the information directly derived from work performed or data obtained in connection with services rendered under this Agreement must first be approved in writing by Client.
- c. If Consultant has any rights to the Client Work Product that cannot be assigned to Client, (a) Consultant unconditionally and irrevocably waives the enforcement of such rights, including all claims and causes of action of any kind against Client with respect to such rights, and agrees, at Client's request and expense, to consent to and join in any action to enforce such rights, and (b) Consultant unconditionally and irrevocably grants to Client during the term of such rights, an exclusive, irrevocable, perpetual, worldwide, fully paid and royalty-free license, with rights to sublicense through multiple levels of sublicensees, to reproduce, create derivative works of, distribute, publicly perform, and publicly display by all means now known or later developed, such rights.

**11. Indemnification.** Consultant, by execution of this Agreement, specifically agrees to hold harmless, defend and indemnify District, its officers, agents, and employees from and against any and all actions, claims, loss, liability, damage and expense arising out of, pertaining to, or relating to the negligent, reckless, or willful misconduct of Consultant, Consultant's employees or subconsultants engaged by Consultant in connection with the work of Consultant pursuant to the terms of this Agreement, excepting only such injury and harm as may be caused solely and exclusively by Client's sole negligence, willful misconduct or active negligence. In no event shall the cost to defend charged to Consultant exceed Consultant's professional's proportionate percentage of fault. Such indemnity shall extend to claims, demands, or liabilities, of every kind or nature whatsoever including, but not limited to, personal injury, wrongful death, and property damage occurring during and/or after completion of the Work. Notwithstanding the foregoing provisions of this paragraph, if Consultant is a design professional, as defined by Section 2782.8(b)(2) of The Civil Code of the State of California, or its successor, then such design professional shall, to the fullest extent permitted by law, indemnify, and hold Client harmless from and against any and all liabilities, losses or damages, arising out of or encountered in connection with this Agreement or the prosecution of work under it to the extent such, liabilities, losses or damages, are actually caused by the negligence of such design professional or its agents, employees, or subcontractors, or their agents or employees. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by Client, its directors, officers, employees, or authorized volunteers.

**12. Insurance.** During the performance of the Services under this Agreement, Consultant and each subconsultant retained by Consultant shall maintain at their own expense the following insurance:

- (1) General Liability Insurance, with a combined single limit of \$1,000,000 for each occurrence and \$2,000,000 in the aggregate.

- (2) Automobile Liability Insurance, with a combined single limit of \$1,000,000 for each person and \$1,000,000 for each accident.
- (3) Workers' Compensation Insurance in accordance with Section 3700 of the California Labor Code and Employers' Liability Insurance Act, with a limit of \$1,000,000 for each occurrence. Consultant shall provide a certificate of compliance in the form attached as **Exhibit C**.
- (4) Errors and Omissions or other applicable Professional Liability coverage in the minimum amount of \$1,000,000.

Said insurance will be evidenced by certification filed with the Client as otherwise specified by this Agreement. All policies shall name **"the South San Joaquin Irrigation District, and each of their respective directors, officers, employees and volunteers"** as additional insureds on the General Commercial Liability and Automobile Liability policies.

- a. **Commercial General Liability and Automobile Liability Insurance:** Consultant shall provide and maintain commercial general liability and automobile liability insurance as set forth in this Agreement.
  1. **Coverage:** Coverage for commercial general liability and automobile liability insurance shall be at least as broad as the following:
    - i. Insurance Services Office ("ISO") Commercial General Liability Coverage (Occurrence Form CG 0001); and
    - ii. ISO Business Auto Coverage (Form CA 0001), covering Symbol 1 (any auto).
  2. **Limits:** Consultant shall maintain limits no less than the following limits:
    - i. General liability of One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) in the aggregate, for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit or products-completed operations aggregate limit is used, either the general aggregate limit shall apply separately to the project/location (with the ISO CG 2503, or ISO CG 2504, or insurer's equivalent endorsement provided to Client) or the general aggregate limit and products-completed operations aggregate limit shall be twice the required occurrence limit; and
    - ii. Automobile Liability of One Million Dollars (\$1,000,000) for bodily injury and property damage each accident limit.
  3. **Required Provisions:** The General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions:
    - i. "The South San Joaquin Irrigation District, and each of their respective directors, officers, employees, and authorized volunteers are to be given insured status (ISO endorsement CG 2010, CG 2033, or insurer's equivalent for general liability coverage) as respect to liability arising out of activities performed by or on behalf of the Consultant; products and completed

operations of Consultant; premises owned, occupied or used by Consultant; and automobiles owned, leased, hired or borrowed by Consultant.” The coverage shall contain no special limitations on the scope of protection afforded to Client, its directors, officers, employees, or authorized volunteers;

- ii. For any claims related to the Services, Consultant's insurance shall be the primary insurance, and any insurance, self-insurance, or other coverage maintained by Client, shall be non-contributory.
- iii. Any failure by Consultant to comply with reporting or other provisions of the insurance policies including but not limited to a breach of any warranties contained therein shall not affect coverage provided to Client, its directors, officers, employees, or authorized volunteers; and
- iv. Consultant's insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability.

4. **Subrogation:** Consultant shall waive all rights of subrogation against Client.

**b. Workers' Compensation and Employer's Liability Insurance:** Consultant and all sub-contractors shall insure (or be a qualified self-insured) under the applicable laws relating to Worker's Compensation insurance, all of their employees working on or about the construction site, in accordance with the "Workers' Compensation and Insurance Act." Division IV of the Labor Code of the State of California and any Acts amendatory thereof. Consultant shall provide employer's liability insurance with limits of no less than One Million Dollars (\$1,000,000) each accident, One Million Dollars (\$1,000,000) disease policy limit, and One Million Dollars (\$1,000,000) disease each employee.

If Consultant is a Sole Proprietor, a Sole Proprietor Business Affidavit Form must be on file with the Client prior to the start of the Work or providing Services.

- c. Deductibles and Self-Insured Retentions:** Any deductible or self-insured retention must be declared to and approved by Client.
- d. Acceptability of Insurers:** Consultant shall purchase the policies of insurance required under this Agreement from insurers having a current A.M. Best Financial Strength Rating of no less than A, and Financial Size Category of no less than VII or as otherwise approved by Client.
- e. Evidence of Insurance:** Evidence of the insurance coverage required to be maintained by Consultant under this Agreement, as represented by Certificates of Insurance and all required endorsements issued by the insurance carrier, must be furnished to Client prior to Consultant starting the Work. Such Certificates of Insurance/endorsement shall state that Client will be notified in writing thirty (30) days prior to cancellation of insurance. Timely renewal certificates will be provided to Client.
- f. Continuation of Coverage:** If any of the required coverages expire during the term of this Agreement, Consultant shall deliver all applicable renewal certificates to Client at least ten (10) days prior to the expiration date.

- 13. Confidentiality.** Consultant shall not, either during or after the term of this Agreement, disclose to any third party, any confidential information relative to the work of Client without the prior written consent of Client.
- 14. Non-Discrimination in Employment.** Consultant shall not discriminate against any employee, applicant for employment or volunteer because of race, color, creed, religion, national origin, sex, age, or physical, mental handicap or any other basis prohibited by applicable law.
- a. Consultant shall take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, color, creed, religion, sex, national origin, age, physical or mental handicap or any other basis prohibited by applicable law. Such action shall include, but not be limited to the following: employment, promotion, demotion or transfer; recruitment or advertising; layoff or termination; rates of pay or other forms of compensation; or selection for training, including apprenticeship. Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices that Consultant shall provide an atmosphere free of harassment as prohibited by applicable law for employees, clients, and volunteers.
  - b. Consultant shall, in all solicitations or advertisements for employees, state that all qualified applicants will receive consideration for employment without regard to race, color, creed, religion, sex, national origin, ancestry, age, physical or mental handicap or any other basis prohibited by applicable law.
- 15. Financial Records.** Consultant shall retain all financial records, including, but not limited to, documents, reports, books and accounting records which pertain to any work or transaction performed pursuant to this Agreement for four (4) years after the expiration of this Agreement. Either District or any duly authorized representative of Client shall, with reasonable notice, have access to and the right to examine, audit and copy such records.
- 16. Compliance With Laws; Labor Code Provisions.** It is the responsibility of the Consultant and any subconsultant to comply with all federal, state and local laws and regulations applicable to Consultant and any subconsultant, including provisions of DIVISION 2, PART 7 of the California Labor Code, and those provisions governing the payment of prevailing wages, working hours, overtime, the employment of apprentices and record keeping requirements. Copies of the prevailing rate of per diem wages are available at District's principal office and will be made available to any interested party on request. The following sections of the California Labor Code are incorporated into and made a part of this Agreement and will be made available by District upon request: Section 1771 (prevailing wage requirement,) Section 1810 (eight hour workday,) Section 1813 (penalty for failure to pay overtime,) Section 1777.5 (apprenticeship requirements); Section 1776 (recordkeeping requirements) and Section 1771.4 (job site posting).
- 17. Assignment.** Consultant may not assign its rights or obligations hereunder without the prior written consent of Client, which may be granted or withheld in Client's sole discretion.
- 18. Amendments.** Modification or amendments to the terms of this Agreement shall be approved by Client's Board of Directors, and consented to in writing by Client as an amendment to this Agreement, and executed by all parties.

- 19. Termination.** Either party shall have the right to terminate this Agreement at any time by serving upon the other party thirty (30) days' advance written notice of termination. The notice shall be deemed served and effective for all purposes on the date it is deposited in the United States mail, postage prepaid and addressed to Consultant at the address indicated in Section 7. In the event of such notice of termination:
- a. Consultant shall, as directed by Client or on such other mutually acceptable terms, proceed with the orderly shutdown of project activities, cease rendering further services and proceed with archiving of project materials.
  - b. Consultant shall deliver to Client copies of all writings and other Work Product prepared pursuant to this Agreement. The term "writings" shall be construed to mean and include handwriting, typewriting, computer files and records, drawings, blueprints, printing, photostating, photographing, and every other means of recording upon any tangible thing, any form of communication or representation, including letters, words, pictures, sounds, or symbols, or combinations thereof.
  - c. Client shall have full ownership and control of all such writings delivered by Consultant pursuant to this Agreement.
  - d. Client shall pay Consultant for work performed until the effective date of termination, subject to the limitations prescribed by Sections 4 and 5 of this Agreement.
- 20. No Rule of Strict Construction.** The parties agree that this Agreement and any amendments or exhibits hereto shall be construed without regard to any presumption or rule requiring construction against the party causing such instrument or any portion thereof to be drafted, or in favor of the party receiving a particular benefit under the Agreement. No rule of strict construction shall be applied against any party. If any provision of this Agreement is determined by a court to be unenforceable, the parties shall deem the provision to be modified to the extent necessary to allow it to be enforced to the extent permitted by law, or if it cannot be modified, the provision will be severed and deleted from this Agreement, and the remainder of the Agreement will continue in effect.
- 21. Applicable Law; Venue.** This Agreement shall be governed by, construed, and enforced in accordance with, the laws of the State of California. Any claims or litigation arising under this Agreement shall be brought by the parties in the Superior Court of California, County of San Joaquin.
- 22. Survival.** The ownership of work product provisions of Section 10, the indemnity provisions of Section 11, the confidentiality provisions of Section 13 and the records inspection provisions of Section 15 shall survive the expiration or other termination of this Agreement.
- 23. Entire Agreement.** This Agreement, together with the exhibits hereto, is the final, complete, and exclusive agreement of the parties with respect to the subject matter hereof and supersedes and merges all prior discussions between the parties. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing and signed by Client and Consultant.

**IN WITNESS WHEREOF**, the parties have signed this Agreement as of the dates indicated below; provided, however, that the Agreement shall be deemed effective as of the Effective Date identified above.

**CLIENT**

**CONSULTANT**

**South San Joaquin Irrigation District**

\_\_\_\_\_

\_\_\_\_\_  
Michael Weststeyn, President  
Date

\_\_\_\_\_

\_\_\_\_\_  
Date

**EXHIBIT "A"**  
**SCOPE OF WORK**

**EXHIBIT "B"**  
**RATE AND FEE SCHEDULE**

## EXHIBIT "C" WORKERS COMPENSATION CERTIFICATION

Labor Code Section 3700 provides, in pertinent part:

"Every employer except the state shall secure the payment of compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this state; or
- (b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either and to pay any compensation that may become due to his or her employees. . ."

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract.

"CONSULTANT"

By: \_\_\_\_\_ Dated: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

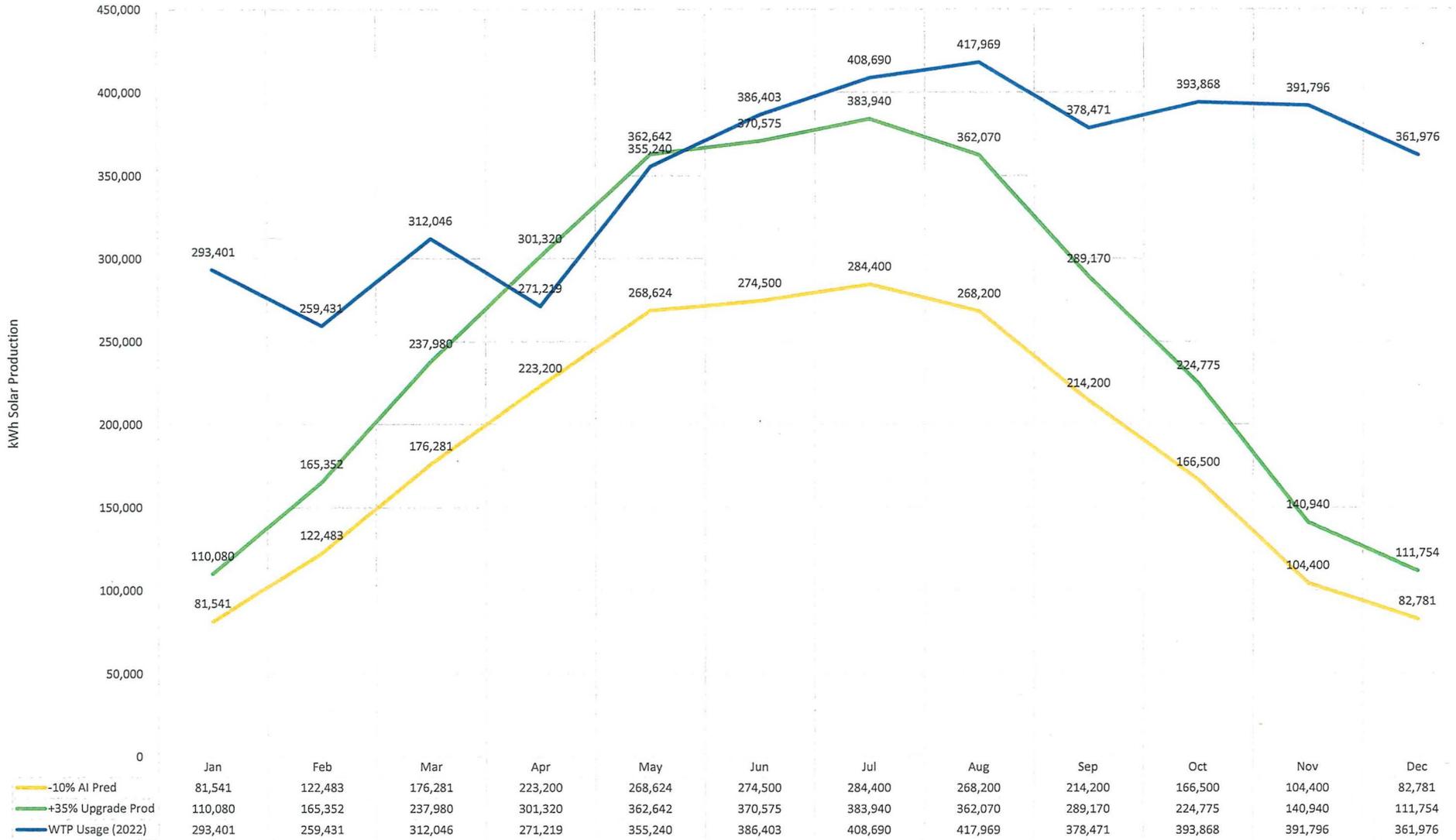
# **Exhibit D.**

**Generation and Load Data**

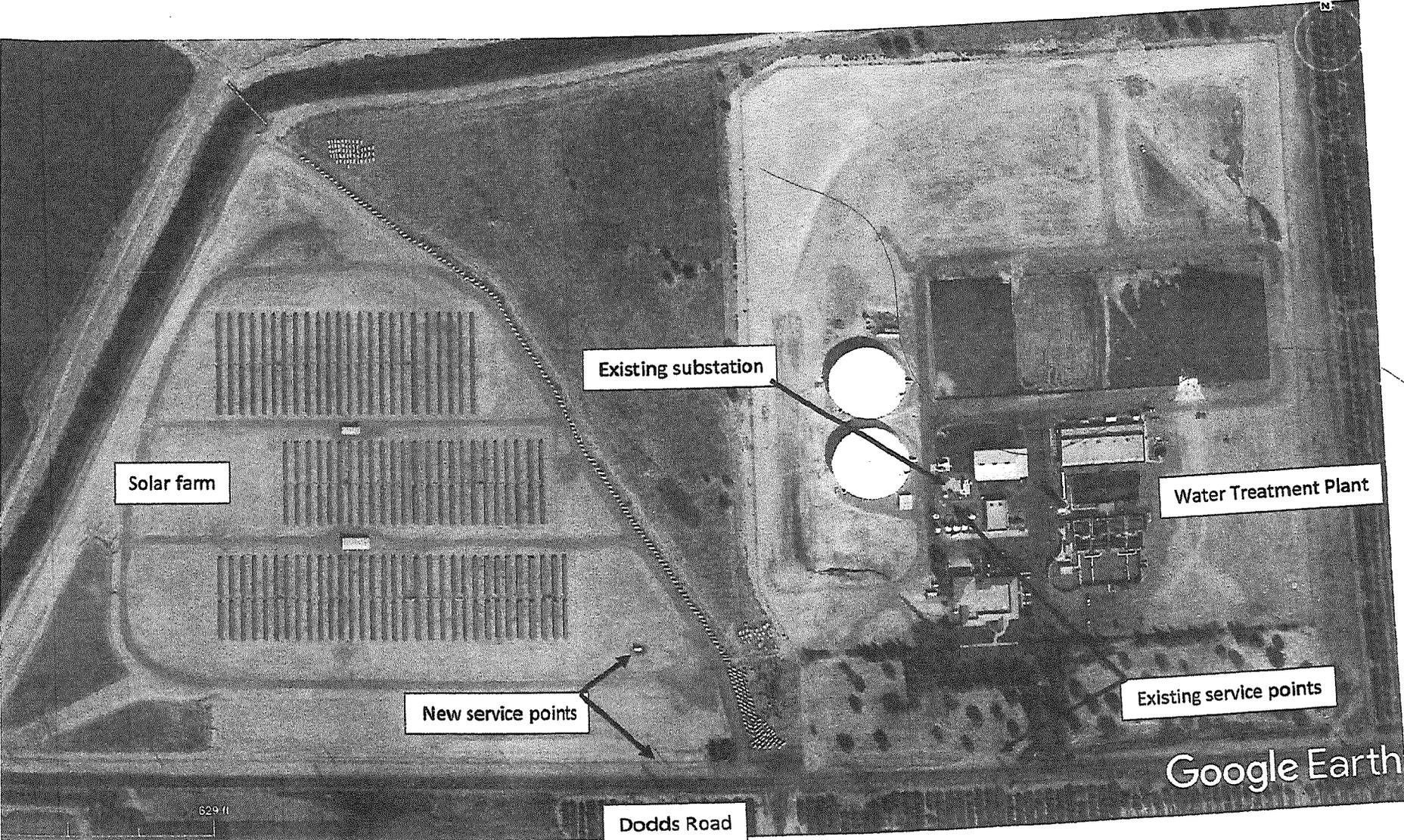
**Site Plan**

**Purchased Solar Equipment Product Information**

Predicted SSJID Solar Production, April 2023



# SSJID WATER TREATMENT PLANT AND SOLAR FARM LAYOUT.



PHASE 2  
(2009) PV2

SSJID  
SOLAR PROJECT  
SITE PLAN  
EXHIBIT 1

PHASE 1  
(2008) PV1



## List of Equipment to be delivered

Product	Quantity	Dimensions
JA Solar Modules 375w mono	8912	78."x45"x44" (pallet size)
SunGrow Inverters SG60KU-M	40	26"x36"x11" (Unit Size)
Transformers - 17kv to 480v	2	1000-1750 kVA 3 Phase Pad-Mounted
RBI Racking Assembly including racking posts, purlins, braces, post top assemblies, and associated parts.	8911	Various

The following items are supporting materials associated with the List of Equipment

### Photovoltaic (PV) Module Specs and Quantities

PV MODULE MANUFACTURER	JA SOLAR
PV MODULE MODEL #	JAM72S01-375/PR
PV MODULE WATTAGE	375
# OF PV MODULES/STRING	19
# OF ACTIVE PV MODULES	8911
# OF INACTIVE PV MODULES	1
TOTAL # OF PV MODULES	8912
TOTAL PV SYSTEM WATTS	3.341625 MW

# Harvest the Sunshine

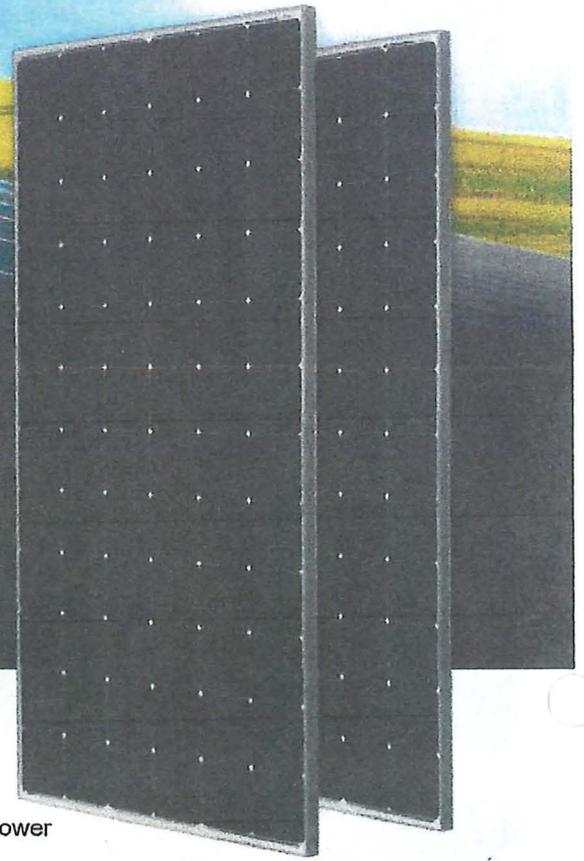


## 375W PERC Module

JAM72S01 355-375/PR Series

### Introduction

Powered by high-efficiency PERCIUM cells, this series of high-performance modules provides the most cost-effective solution for lowering the LCOE of any PV systems large or small.



5 busbar solar cell design



Higher output power



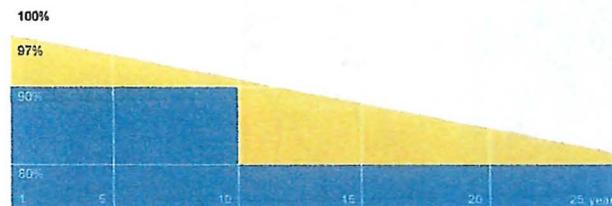
Excellent low-light performance



Lower temperature coefficient

### Superior Warranty

- 12-year product warranty
- 25-year linear power output warranty



■ JA Linear Power Warranty ■ Industry Warranty

### Comprehensive Certificates

- IEC 61215, IEC 61730, UL 1703, IEC TS 62804, IEC 61701, IEC 62716, IEC 60068-2-68
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- OHSAS 18001: 2007 Occupational health and safety management systems
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules – Guidelines for increased confidence in PV module design qualification and type approval



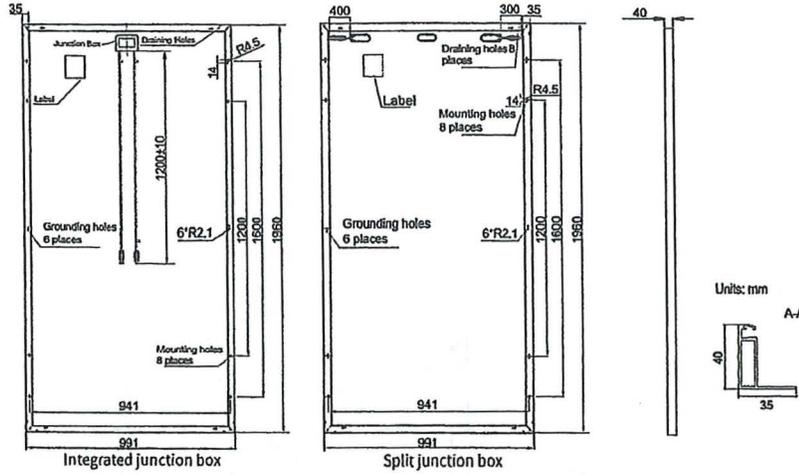
# JA SOLAR

[www.jasolar.com](http://www.jasolar.com)

Specifications subject to technical changes and tests  
JA Solar reserves the right of final interpretation



MECHANICAL DIAGRAMS



SPECIFICATIONS

Cell	Mono
Weight	22kg±3%
Dimensions	1960mm×991mm×40mm
Cable Cross Section Size	4mm <sup>2</sup>
No. of cells	72(6x12)
Junction Box	IP67, 3 diodes
Connector	MC4 Compatible(1000V) QC 4.10-35(1500V)
Packaging Configuration	27 Per Pallet

Figure 7. Junction box technical drawing (mm) (unit: mm)

ELECTRICAL PARAMETERS AT STC

TYPE	JAM72S01 -355/PR	JAM72S01 -360/PR	JAM72S01 -365/PR	JAM72S01 -370/PR	JAM72S01 -375/PR
Rated Maximum Power(Pmax) [W]	355	360	365	370	375
Open Circuit Voltage(Voc) [V]	47.45	47.66	47.93	48.18	48.45
Maximum Power Voltage(Vmp) [V]	38.76	38.96	39.21	39.45	39.75
Short Circuit Current(Isc) [A]	9.69	9.81	9.85	9.91	9.98
Maximum Power Current(Imp) [A]	9.16	9.24	9.31	9.38	9.44
Module Efficiency [%]	18.3	18.5	18.8	19.0	19.3
Power Tolerance			0~+5W		
Temperature Coefficient of Isc(α <sub>Isc</sub> )			+0.060%/°C		
Temperature Coefficient of Voc(β <sub>Voc</sub> )			-0.300%/°C		
Temperature Coefficient of Pmax(γ <sub>Pmp</sub> )			-0.380%/°C		

STC

Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, AM1.5G

Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

ELECTRICAL PARAMETERS AT NOCT

TYPE	JAM72S01 -355/PR	JAM72S01 -360/PR	JAM72S01 -365/PR	JAM72S01 -370/PR	JAM72S01 -375/PR
Rated Max Power(Pmax) [W]	261	265	268	272	276
Open Circuit Voltage(Voc) [V]	43.88	44.10	44.33	44.55	44.81
Max Power Voltage(Vmp) [V]	35.81	36.03	36.25	36.50	36.75
Short Circuit Current(Isc) [A]	7.68	7.74	7.80	7.86	7.91
Max Power Current(Imp) [A]	7.29	7.34	7.40	7.45	7.50

NOCT

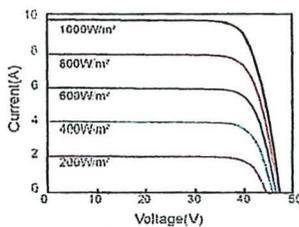
Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C,  
wind speed 1m/s, AM1.5G

OPERATING CONDITIONS

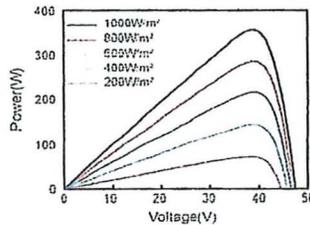
Maximum System Voltage	1000V/1500V DC(IEC)
Operating Temperature	-40°C~+85°C
Maximum Series Fuse	20A
Maximum Static Load,Front	5400Pa
Maximum Static Load,Back	2400Pa
NOCT	45±2°C
Application Class	Class A

CHARACTERISTICS

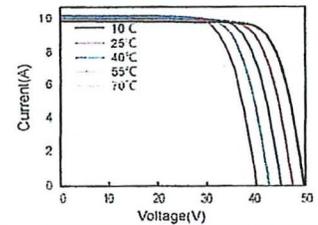
Current-Voltage Curve JAM72S01-355/PR



Power-Voltage Curve JAM72S01-355/PR



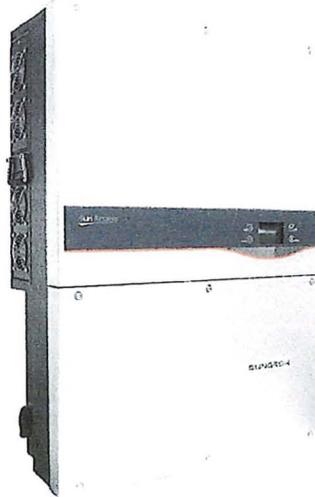
Current-Voltage Curve JAM72S01-355/PR



# SUNGROW

## SG60KU-M

String Inverter For North America



### High Yield

- Max. efficiency 98.9 %, CEC efficiency 98.5 %
- Long-term overload at 1.1 Pn
- Up to 4 MPP trackers



### Easy O&M

- Integrated string current monitoring function for fast trouble shooting
- Compact design and light weight for easy installation
- Plug-in design of fan and SPD, easy for on-site maintenance



### Saved Investment

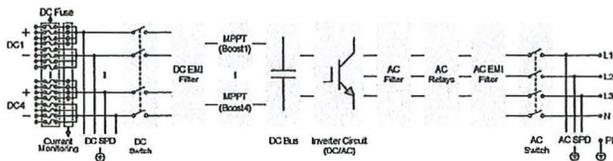
- Max. DC/AC ratio up to 1.5
- Integrated DC combiner box, DC/AC switch and DC/AC overvoltage protection



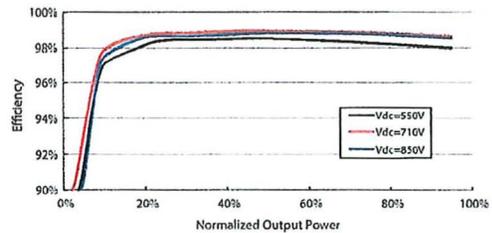
### Grid Support

- Compliance with standards: UL1741, UL1741 SA, IEEE 1547, IEEE 1547.1, CSA C22.2 No.107.1-01
- Low/High voltage ride through (L/HVRT)
- Active & reactive power control and power ramp rate control

Circuit Diagram



Efficiency Curve



© 2018 Sungrow Power Supply Co., Ltd. All rights reserved.  
Subject to change without notice. Version 1.0

**Input (DC)**

Max. PV input voltage	1000 V
Min. PV input voltage / Startup input voltage	300 V / 300 V
Nominal input voltage	710 V
MPP voltage range	300 – 950 V
MPP voltage range for nominal power	550 – 850 V
No. of independent MPP inputs	4
Max. number of PV strings per MPPT	4
Max. PV input current	112 A (28 A / 28 A / 28 A / 28 A)
Max. current for input connector	12 A
Max. DC short-circuit current	200 A (50 A / 50 A / 50 A / 50 A)

**SG60KU-M****Output (AC)**

Nominal AC power (at 45 °C)	60000 W
Max. AC output power at PF=1 (at 40 °C)	66000 W
Max. AC apparent power (at 40 °C)	66000 VA
Max. AC output current	80 A
Nominal AC voltage	3 / N / PE or 3 / PE, 277 / 480 V
AC voltage range	422 – 528 V
Nominal grid frequency / Grid frequency range	60 Hz / 55 – 65 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % In
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / Connection phases	3 / 3

**Efficiency**

Max. efficiency / CEC. efficiency	98.9 % / 98.5 %
-----------------------------------	-----------------

**Protection**

DC reverse connection protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch / AC switch	Yes / Yes
DC fuse	Yes (positive and negative, 15 A)
PV string current monitoring	Yes
Arc fault circuit interrupter (AFCI)	Yes
Overvoltage protection	DC Type II / AC Type II

**General Data**

Dimensions (W*H*D)	665*915*276 mm 26.2" * 36.0" * 10.9"
Weight	70 kg 154.3 lb
Isolation method	Transformerless
Degree of protection	NEMA 4X
Night power consumption	< 1 W
Operating ambient temperature range	-25 to 60 °C (> 45 °C derating) -13 to 140 °F (> 113 °F derating)
Allowable relative humidity range (non-condensing)	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating) 13123 ft (> 9843 ft derating)
Display / Communication	Graphic LCD / RS485, Ethernet
DC connection type	Screw clamp terminal (10 AWG, Cu or Al)
AC connection type	Screw clamp terminal (3/0 AWG, Cu or Al)
Compliance	UL1741, UL1741 SA, IEEE 1547, IEEE1547.1, CSA C22.2 No.107.1-01
Grid support	LVRT, HVRT, active & reactive power control and power ramp rate control
Type designation	SG60KU-M-10