



March 13, 2019

Mr. Daniel Howell
Senior Director of Administrative Services
Eastern Municipal Water District
2270 Trumble Road
Perris, CA 92530

Re: EMWD's Phase 3 Solar Energy Project implementation, proposal for Technical Support Services

Dear Mr. Howell,

In support of the implementation of Eastern Municipal Water District's (EMWD's) Phase 3 Solar Renewable Energy Initiative, TerraVerde Energy (TerraVerde) offers the following proposal for professional consulting services associated with the District's proposed 5-site, 15.9MW, NEM 2.0 and RES-BCT solar projects. This proposal includes a scope of Owner's Rep Technical Support Services requested by the District (as an amendment to existing contract #111262) for all remaining phases of the project, starting at the execution of the five PPA contracts (expected April 2019), and ending at post-COD project close-out (estimated September 2020) for all five solar projects.

The primary purpose of TerraVerde's Technical Support Services is to ensure compliance to the terms and conditions of the PPA contract documents by the PPA Provider during all phases of the design, construction, commissioning and close-out of the projects, including all critical path project schedule elements; and compliance to the applicable Interconnection Agreements by Southern California Edison during design and construction of the interconnection facilities and utility distribution upgrades. TerraVerde will operate as an integrated member of EMWD's project management team which will include District staff, EMWD's Civil Engineering consultant, Civil/Site preparation contractor, Electrical inspectors, and TerraVerde; and will provide technical support consisting of the following tasks:

A. Project Kickoff and Communications:

1. Facilitate and lead project kick-off meeting with PPA Provider's project team, EMWD Staff, and EMWD's Civil consultants and contractors to review/discuss: roles & responsibilities, PPA contract terms, Lease Agreement terms, General Conditions & Technical Specifications, project schedule and near-term project milestones, District's civil/site preparation scope & schedule, PPA Provider's mobilization & work plans, PPA Provider's Safety Plan, District's site operations, District's requirements for site access, security, and safety, status of Interconnection Agreements & GIA milestones, communication & correspondence protocols, conflict & issue resolution protocols, submittals review & response protocols, change order submittal/review/comment process overview, plan for bi-weekly project status meetings/calls, project schedule update

process & format. In addition, TerraVerde will facilitate and lead a transition process from PPA execution to the pre-design phase (see Pre-design Activities) that will include SCE design coordination.

2. Oversee bi-weekly (every 2 weeks), project progress status meetings/calls and preparation/distribution of meeting agendas and meeting minutes (see Attachment D of the Technical Specifications) to all applicable participants/contacts.
3. Oversee project schedule (3-week look ahead) update process and distribution of updated schedules to applicable contacts through the entire design, construction and commissioning process.
4. Maintain an RFI log for each project and share with District upon request.

B. Pre-design Activities:

5. Lead a transition planning process meeting to facilitate a smooth transition from Board approval of PPAs through the execution to the pre-design activities that will include coordination of: PPA provider's site due diligence (entitlements investigation), EMWD Engineering and Operations staff roles & responsibilities, Civil construction schedule tracking, SCE GIA milestones and action plans for schedule compliance, PPA Provider's on-site design due diligence plan (geotechnical, etc.), and mobilization planning.
6. Oversee PPA Provider's site due diligence and pre-design activities in coordination with District's civil/site preparation scope and Plant Operations and respond to PPA Provider's RFIs and questions as needed.
7. Oversee PPA Provider's compliance to the General Conditions and Technical Specifications during early stage Conditions Precedent activities.
8. Assist EMWD staff with review, comment and approval of all submittals from PPA Provider during the pre-design process (see Attachment A., list of anticipated submittals).
9. Assist EMWD staff in reviewing PPA Provider's site due diligence findings and provide guidance in responding to and resolving documented issues (previously unknown conditions) that may impact design and/or construction.
10. Oversee PPA Provider's ITC eligibility assessment and review with EMWD staff.
11. Oversee PPA rate changes due to allowable cost/rate increases (or decreases) per the terms of the PPA and review with EMWD staff (provide updated savings proformas as required).

C. SCE Interconnection Applications & Interconnection Agreements, and SCE design/build scope:

12. Manage SCE Interconnection Application modifications and required design submittals as needed (capacity upsizing, facilities ownership changes, etc.).
13. Oversee preparation, delivery, review, approval and execution of remaining SCE GIAs.
14. Oversee achievement of all GIA milestones, including payment schedules, customer information delivery, and coordination of assignment to PPA Provider.
15. Oversee design review for SCE interconnection facilities and distribution facilities upgrades with PPA Provider and EMWD Staff. Facilitate bi-weekly meetings/calls with SCE's Project Manager and Interconnection Facilities design team during the design and construction phases.
16. Oversee coordination of SCE's field work scope and PPA Provider's interconnection scope to ensure accurate communication, prevention of scope gaps, schedule compliance, Rule 21 compliance, and outage notification planning.
17. Oversee Utility signoff and issuance of Permit to Operate (PTO) for each project/site.

18. Assist EMWD staff with proper rate tariff implementation for each site as needed.

D. Design Review & Approval:

19. Oversee PPA Provider's compliance to engineering and design requirements as described in Section 3 of the Technical Specifications.
20. Assist EMWD staff with the design review process for Preliminary, 50%, 90% and 100% design reviews for all five projects and manage communication of all required changes/updates with PPA Provider.
21. Oversee PPA Provider's submittals during the design process and assist EMWD staff with review/approval (see Attachment A., list of anticipated submittals).
22. Oversee PPA Provider's compliance to equipment standards and performance monitoring specifications as described in Section 4 and 5 of the Technical Specifications.
23. Oversee PPA Provider's progress and completion of all PPA Conditions Precedents and assist District with NTP communication to initiate construction (see Attachment H of the Technical Specifications).

E. Project Management, Construction Phases:

24. Facilitate and attend on-site construction kickoff meeting and weekly construction status meetings/calls to ensure PPA Provider's schedule compliance (and weekly updates to the 3week look-ahead schedule).
25. Oversee PPA Provider's compliance to construction standards and requirements as described in Section 6 of the Technical Specifications.
26. Assist EMWD staff with coordination activities and communication for minimized impact to Phase 2 solar projects during Phase 3 construction, as needed.
27. Assist EMWD staff with review, comment and approval of submittals from PPA Provider during the procurement and construction process (see Attachment A. list of anticipated submittals).
28. Oversee the change order submittal, review and comment process, including confirmation of change order request/need rational, financial analysis, and recommendations to EMWD staff.
29. Assist PPA Provider with coordination of EMWD's (sub-contracted) *electrical inspections as needed.
30. Oversee installation and start-up of Data Acquisition Systems, weather stations, monitoring systems, and telemetry systems per the Technical Specifications and SCE's requirements.
31. Oversee testing, start-up and commissioning for each project per the Technical Specifications, and compliance to Attachment F of the Technical Specifications.

F. PPA Provider COD and Project Closeout:

32. Oversee PPA Provider COD process and review all documentation with EMWD staff, including the results of the prescribed commissioning procedures and data collection (Attachment F of the Technical Specifications).
33. Confirm monitoring system configuration, operation, data transfer, and District's connection to the system.
34. Oversee implementation of the Performance Monitoring & Reporting Service (PMRS) as described in Section 5 of the General Condition & Technical Specifications.
35. Oversee completion of PPA Provider's Punchlist items for each project/site per PPA contract terms.



- 36. Oversee PPA Provider’s compliance to project closeout process and delivery of all as-built documentation and related information described in Section 7 of the Technical Specifications.
- 37. Oversee SCE’s compliance to the RES-BCT Indifference Payment Settlement Agreement.

G. Project Economics Updates:

- 38. Provide updated project financials and net savings proformas as needed based on changes to project scope, PPA rates, and/or SCE rate schedule changes. Also provide end of project savings proformas based on as-built conditions for each project.
- 39. Oversee PPA Provider’s compliance to the Cost Reimbursement Agreement terms.
- 40. Oversee SCE project cost accounting recap report and disposition of any applicable refunds.
- 41. Assist EMWD staff with preparation of project status presentations to Committees and the Board as needed.

*: EMWD will hire a professional electrical inspector to inspect all medium voltage (12kV) and 480V connections and electrical equipment installations for compliance to all applicable codes and standards. TerraVerde will assist with coordination of PPA Provider and Electrical Inspector for the inspections, and will include the Electrical Inspector’s scope, schedule, and deliverables in overseeing the schedule coordination for each project. Note: If desired, the District may add the cost of electrical inspections to the Reimbursement Agreement. TerraVerde will oversee changes to the PPA terms, PPA rates, and Reimbursement Agreement terms as needed to make this addition to the reimbursable costs.

TerraVerde maintains safety procedures that are consistent with EMWD’s Safety Program and will adhere to the District’s safety protocols and site access procedures while on EMWD operating plant sites and District-owned properties.

TerraVerde’s level-of-effort estimate for the above consulting services is \$268,799. Our not-to-exceed (NTE) price, including estimated expenses (\$13,440) is: **\$282,239**.

The projected schedule: April 1, 2019 to July 1, 2020 (15 months). Note: there may be some overlap in the timing of certain tasks in this scope of services and the PPA negotiation phase scope of services currently in progress.

Level of effort breakdown is provided as information only. All billing will be based on Billing Milestones shown below. Level of effort adjustment will be made based on requested changes to proposal scope and/or deliverables, and billing milestones will be adjusted accordingly.

Deliverables and Billing Milestones

<u>Description of Milestone/Deliverable</u>	<u>% of Proposal</u>
Completion of project kickoff meeting and distribution of meeting minutes	5%
Completion of PPA Provider’s pre-design site due diligence and delivery of results for all sites	8%
Execution of all five GIAs (including Interconnection Application changes as required)	7%
Completion of 50% design review by TerraVerde and the District for all projects	10%
Completion of PPA Provider’s Conditions Precedents & release of NTP for Construction for all projects	20%
Completion of final design review for SCE Interconnection Facilities/Distribution Upgrades for all projects	8%
Completion of Construction kickoff meeting and distribution of meeting minutes	5%



Completion of SCE’s Interconnection Facilities and Distribution Upgrades construction for all projects	10%
Completion of PTO for all projects	8%
Completion of COD for all projects	6%
Completion of System Commissioning for all projects and delivery of reports to District	5%
Delivery of updated (as-built) savings proformas for all projects	5%
Completion of Punchlist & delivery of all project closeout documentation for all projects	1%
Confirmation of SCE’s calculation of RES-BCT project Indifference Payment	1%
Confirmation of SCE’s final project accounting for all projects	1%
Total:	100%

TerraVerde Hourly Rate Table (basis for level-of-effort estimate)

<u>Resource Classification</u>	<u>Assigned Resource</u>	<u>Hourly Rate</u>	<u>ACWA Discounted Rate</u>
Principal, Technical Advisor	Rick Brown	\$225	\$203
EVP Structured Finance		\$210	\$189
Engineering Director	Ali Chehrebsaz	\$205	\$185
Sr. Engineer, Project Developer	Jen Petherick	\$195	\$176
Account Manager	Kevin Ross	\$190	\$171
Project Manager	Brandon Hartman	\$185	\$167
Energy Engineer / Audit Mgr	Robin Weldy	\$165	\$149
Energy / Financial Analyst	Patrick McKinney	\$155	\$140
Data Administrator	Ashley Hale	\$80	\$72

Travel expenses are estimated. Actual expenses will be billed at cost.

We trust the District will find our industry leading experience, analytical capabilities, and knowledge of solar energy PPA project execution to be an excellent fit for the implementation of EMWD’s Phase 3 solar projects. In good faith, TerraVerde is prepared to initiate the above described scope of services with a Letter of Intent (LOI) from the District to add this scope of work as an amendment to the existing Agreement #111262. If you have any questions, please feel free to contact me.

Sincerely,

Kevin Ross, VP Business Development
TerraVerde Renewable Partners, LLC
 520 E. Avenida Pico #3793
 San Clemente, CA 92674-9998
 949-212-6555 Kevin.Ross@tvrpllc.com

**Attachment A
Submittals List (estimated)**

<u>Description</u>	<u>Estimated Qty</u>
PPA Provider's site due diligence reports for each site (Title Reports, Surveys, 12kV electrical infrastructure inspections, etc.)	5 sites
PPA Provider's confirmation of Lease Easements for each site	5 sites
PPA Provider's geotechnical study report for each site	5 sites
PPA Provider's Project Schedule updates for each project (from pre-design activities through project completion and close out)	60 weeks
PPA Provider's Mobilization Plan for each site	5 sites
PPA Provider's Work Plan for each project (all phases, and all updates)	5 sites
PPA Provider's Safety Plan (all phases and all updates)	5 sites
PPA Provider's design drawings and engineering documentation for each project (30%, 50%, 90% and Final) electrical, mechanical, civil, structural, equipment installation, etc.	5 projects
PPA Provider's requests for design changes	25 (est)
PPA Provider's requests for alternate/equal material/equipment substitutions	25 (est)
PPA Provider's ITC eligibility assessment opinion for each project	5 PPAs
PPA Provider's Change Order requests	25
All remaining SCE GIA documents	5 projects
SCE Interconnection Facilities design drawing and engineering documentation for each project	5 sites
SCE Distribution Upgrade design drawing and engineering documentation for each project	5 sites
SCE construction schedule updates	5 projects
SCE equipment data sheets and specifications	5 projects
SCE telemetry settings and programming reports	5 projects
PV system equipment data sheets and specifications	50 (est)
PV system equipment warranties	25 (est)
PV systems startup checklists and test data	5 systems
DAS and weather station startup/operation reports	5 projects
Monitoring system startup checklists and operations manuals	5 projects
SCE PTO checklists and SCE signoffs	5 projects
PPA Provider's COD checklists	5 PPAs
PV systems Commissioning data and reports	5 projects
Inspection reports (all phases)	5 projects
Punchlist for each site/project	5 projects
As-built design & documentation packages for each project	5 projects
O&M Operation work plan and O&M manuals	5 systems