

EL DORADO COUNTY SOLAR PROJECT



TerraVerde
ENERGY

El Dorado County Solar

History of Solar Program:

- Concept plans at Public Safety Facility anticipated future solar plans.
- EIR included conceptual drawings and reflected a 7 acre site.
- USDA's expressed support for the plan.
- How to proceed?

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Finding the right team.

- Independent and Objective.
- Extensive knowledge CEC/PUC, State & Federal rules.
- Experience with similar sized projects owned by public agencies in California in PG&E territory.
- In-house expertise in modeling & data analysis, rate structures and delivery options.
- Able to guide the County in procuring and managing the necessary services.
- Expertise in minimizing financial exposure and risk.

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Request for Information and Statement of Qualifications for Solar Management Services:

- Request of Information & Statement of Qualifications issued on April 19, 2017
- Nine firms responded on May 10th.
- Three firms were interviewed.
- TerraVerde Energy LLC was selected.

El Dorado County Solar

TerraVerde Energy, LLC

Rick Brown, PhD, President

TerraVerde's Experience

- An independent energy advisory firm
- Feasibility, project development, and asset management services
- Solar, battery storage, and energy efficiency
- 9 years: \$390 Million in projects
- Solar: 85 MWs, Battery: 13 MWs, Energy Efficiency: 300+ buildings
- California Energy Commission and Department of Energy Research Grants to develop software and programs to incentivize implementation of solar , battery storage, Electric Vehicles and other advanced energy devices

Project Scope

Public Safety Facility

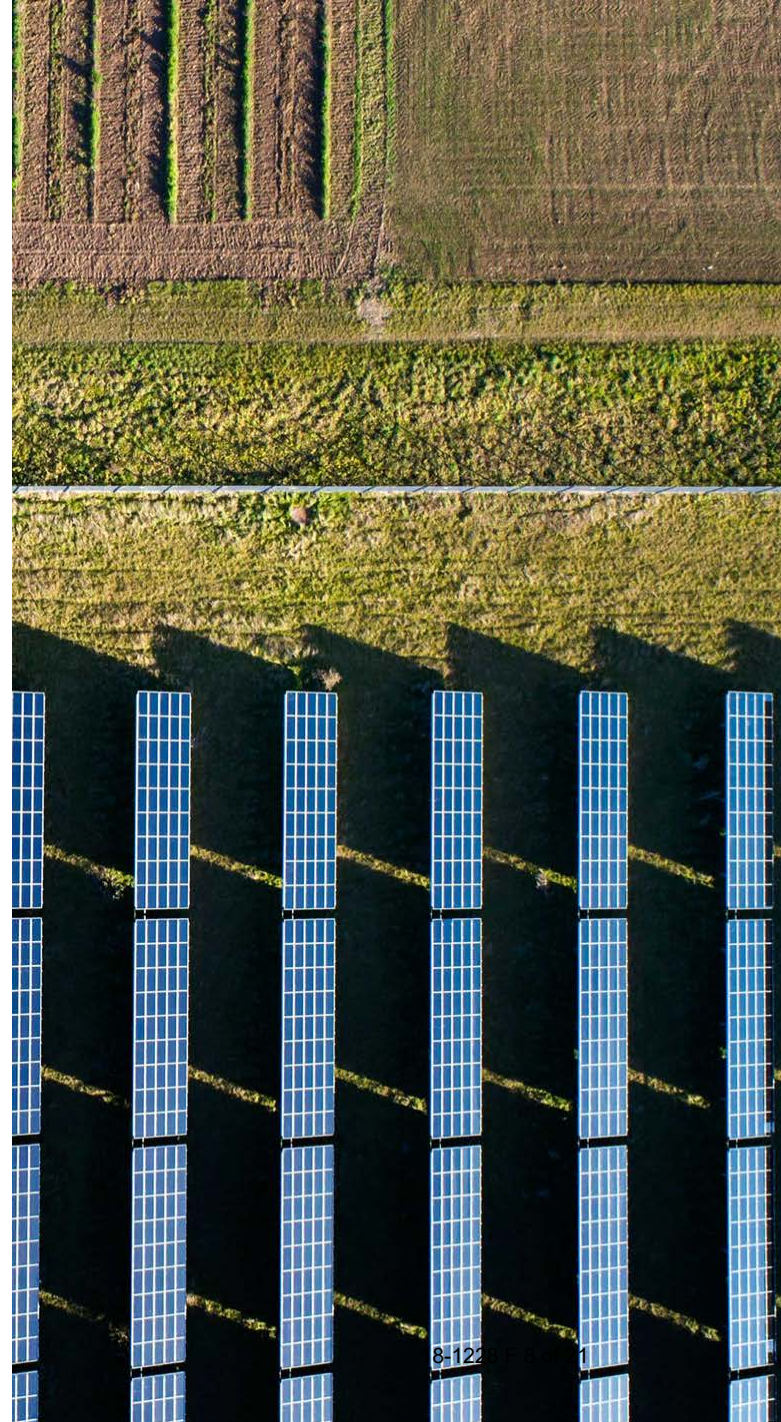
- 580 kW of solar
- Shade Structures
- Grandfathered under current PG&E Time of Use Periods
- Under PG&E Net Metering Tariff (NEM)
- Projected 25 Year Net Savings: \$1.04 Million



Project Scope

County Solar Farm

- Currently scoped at 2.3 MWs
- Will provide bill credits to approximately 13 County Facilities (for example: Septage Plant, Social Services, Library)
- Under PG&E Renewable Energy Self Generation Bill Credit Transfer Tariff (RESBCT)
- Projected 25 Year Net Savings: \$2.33 Million



Project Timelines

- 9/13/18: RESBCT Interconnection Agreement Comments Due
- 9/24/18: RFP Release
- 10/2/18: Notifications of Interest Due
- 10/9/18: Bid Conference/Site Walk
- 11/12/18: RFP Responses Due
- 11/13/18: PPA Pricing Review with County Staff
- 11/14/18: Execute Interconnection Agreement
- 11/30/18: Complete RFP Review, Evaluation & Staff Presentation
- 12/11/18: Shortlist Interviews
- 12/14/18: Selection of Preferred PPA Provider
- 1/25/19: Complete Value Engineering/Contract Negotiation

Project Timelines - Continued

- February, 2019: Presentation of Contract to Board
- 3/1/19: Notice to Proceed
- 5/1/19: Project Design Complete
- July, 2019: Public Safety Facility Solar Array Construction Completion
- December, 2019: RES-BCT Solar Array Construction Completion

Power Purchase Agreement

- The system is owned, operated, and maintained by a third party, your PPA Provider
- They sell your agency the energy produced by the system
- They also harvest any rebates (CSI), incentives (ITC), and RECs connected to the system

Power Purchase Agreement

Power Purchase Agreement Contract Features

- Third Party Owner (PPA Provider) finances capital cost and pays for all operating costs for the term of the contract (generally 20-25 Years); enabling Site Host (County) to obtain financial and other benefits without impacting the County's balance sheet
- Because the PPA Provider can claim a 30% Investment Tax Credit and Accelerated Depreciation, they are able to offer a PPA contract price at a significant discount versus other forms of financing

Power Purchase Agreement

Power Purchase Agreement Contract Features

- Site host benefits from a fixed cost for all electricity purchased from PPA Provider for the term of the contract; avoids electricity inflation spikes
- Site host has the option of buying out the contract as early as six years; potentially increasing long-term savings profile
- At the end of the contract term, the Site Host has the option of having the PPA Provider remove the solar facilities or entering into a contract extension or buy-out

Power Purchase Agreement

Power Purchase Agreement Contract Features

- Site host development costs can be rolled into PPA contract (e.g., Consulting, Legal, Inspection, Permitting, Interconnection); eliminating any direct costs of development

Asset Management

Site Host

- Performance Monitoring
- Energy & Financial Performance Analysis
- PPA Provider Oversight

PPA Provider

- Preventive Maintenance: annual inspections & maintenance
- Corrective Maintenance: outages, underperformance, soiling

Fee Structure/Cost Reimbursement Agreement

- TerraVerde's fees are structured on a "level of effort" phased approach
- The County is only obligated to pay for the scope of work completed during an approved phase
- The County can execute a Cost Reimbursement Agreement with the PPA Provider to pay for any development costs the County may incur, including TerraVerde's fee
- A significant portion of the fee can be included in the PPA Provider's Project cost basis in determining the Solar Investment Tax Credit

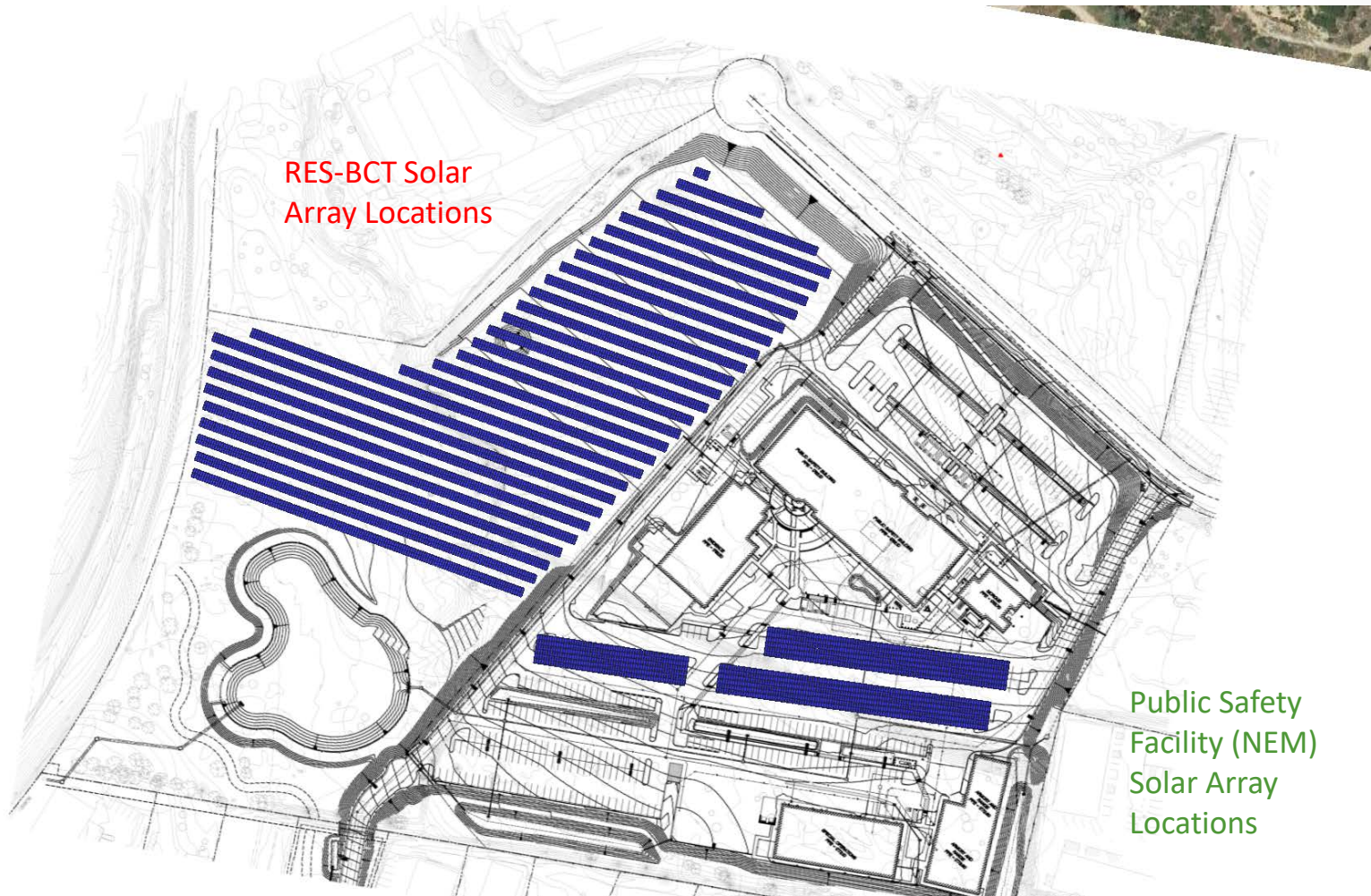
QUESTIONS?

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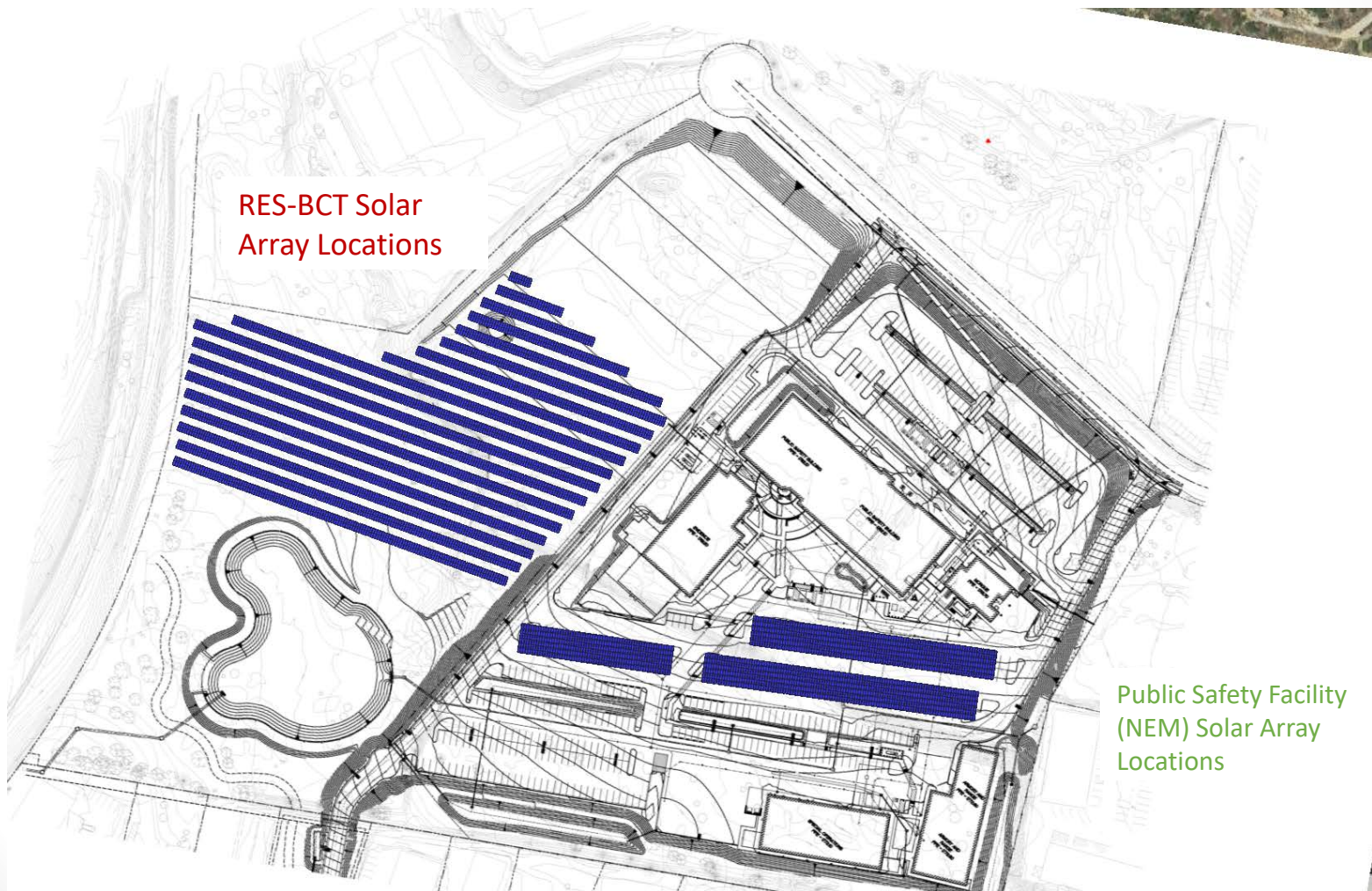
Best Use of Solar Farm Site – Options

- Need to consider our options – Future Discussion
- 100% Utilization of western portion for solar generation.
- Partial use of western portion
- No solar on western portion – Save for future build site

County of El Dorado Solar – Opt 1 Full Build Public Safety Facility and RES-BCT Solar Farm



El Dorado County Solar - Opt 2 Partial Build Site. Public Safety Facility and RES-BCT Solar Farm



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Questions ?