Newcomb | Anderson | McCormick
ENERGY ENGINEERING AND CONSULTING

April 8, 2013

Newcomb Anderson McCormick proposes the following tasks to support San Leandro Unified School District for the duration of the solar PV project. We propose to act as the "owner's representative" for each phase of the project, coordinating our work with District staff, Harris and Associates construction management resources, and personnel from the selected solar provider. The tasks described below will ensure the District has access to the expertise required to determine the feasibility of the project, procure equipment and services from a solar provider, negotiate a contract for implementation of solar systems, review and approve technical documentation and other contract submittals, as well as the capabilities to provide technical oversight of the solar provider during design, construction, and system testing/commissioning.

		Task Owner*		NAM Effort	
Task	**Activity**	NAM	SLUSD	Hours	Est. Cost
Solar Feasibility	Gather site and utility data		1	102	$17,850
	Determine size, location, and mounting type of arrays	1			
	Develop financing options	1	2		
	Review regulatory issues	1			
	Build and run economic models	1			
	Develop feasibility report	1			
	Public outreach	2	1		
	Facilitate educational and curriculum opportunities	2	1		
	Support District decision-making, including BOE meetings and materials	1	2		
Develop RFP	Draft technical specifications	1		236	$41,300
	Draft front end & general conditions	1	2		
	Document existing conditions for site specific appendices	1			
	Draft instructions to proposers	1			
	Develop evaluation methodology, scoring criteria and scoring sheets	1			
	Identify and edit model solar implementation agreement	1			
Solicitation Support	Prepare for and attend proposers' conference and site walks	1	2	44	$7,700
	Prepare responses to proposer questions	1	2		
	Develop addenda, as needed	1	2		
Proposal Evaluation	Review and conduct preliminary proposal scoring	1	1	165	$28,875
	Develop short list for interviews	1	1		
	Prepare for and attend proposer interviews	1	1		
	Finalize proposal scoring	1	1		
	Develop Proposal Evaluation Report	1			
	Support District decision-making, including BOE meetings and materials	1	1		

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Task	Activity	Task Owner*		NAM Effort	
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Contract Negotiations	Develop negotiation strategies	1	1	55	$9,625
	Identify cost drivers and other scope issues in need of negotiating	1	1		
	Participate in negotiations meetings	1	1		
	Develop and/or review contract modifications	1	1		
	Support District decision-making, including BOE meetings and materials	1	1		
Project Management	PM meetings	2	1	86	$15,050
	Status reports/dashboards/metrics		1		
	Schedule review/management		1		
	Respond to RFIs (techincal issues by NAM, all others by SLUSD)	2	1		
	Stakeholder communications	2	1		
	Document management	1			
	Contract administration	2	1		
	Contract submittal review and tracking (non-design)	1			
Design Review	Review appropriate design documentation at critical phases of design	1	2	344	$60,200
	Validate future load estimates to ensure appropriate system size	1			
	Validate design documentation conforms with contract/RFP	1			
	Ensure design is reviewed by appropriate District personnel and approved by the District	2	1		
	Ensure regulatory requirements are met and Contractor obtains all necessary approvals and permits (including DSA, fire department, and utility)	1			
	Validate updates to PV system performance with economic modeling	1			
	Ensure that all industry standards for PV systems are met, including UL, IEEE and NEC and that documentation is provided regarding factory bench testing, as required	1			
	Advise on value engineering opportunities, product substitution issues, and Change Orders	1	2		
	Ensure that design and subsequent project phases will meet overall project schedule and budget requirements	1	1		
	Record and track all open design issues using NAM-developed tools. Ensure all design issues are resolved and closed-out prior to recommending approval	1			
	Facilitate design review meetings for each phase of design. Participate in design development meetings with solar provider, if necessary	1	2		

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Technical Oversight During Construction	Provide technical and engineering review and validation of contractor submittals, requests for substitution, and technical questions	1	2	90	$15,750
	Inspection of solar and electrical field work, with a focus on the DC side of each system	1	2		
	Monitor workmanship and quality	2	1		
	Ensure contract requirements are met		1		
	Ensure DSA requirements are met		1		
	Ensure systems are installed per approved design		1		
	Review of schedules, status reports, and forecasts		1		
	Respond to RFIs (techincal issues by NAM, all others by SLUSD)	1	2		
	Participate in construction, project management, and Owner's meetings where appropriate	2	1		
	Advise on value engineering opportunities	1	1		
	Assist with PV-specific communications and stakeholder outreach	2	1		
Construction Management	Oversight of construction work in the field		1	0	$0
	Coordination of construction-related issues (delivery and storage of materials, work crew logistics)		1		
	Regular communications with District stakeholders (school administration, faculty, students other affected parties)		1		
	Inspection and acceptance of sign-off of construction work		1		
	Creation of project schedules and progress reports		1		
	Ensure that campus operational impacts from construction are minimized and comply with contract requirements		1		
QA, System Testing, and Commissioning	Participate in QC and permit inspections to verify all inspection and permits are properly collected		1	132	$23,100
	~~Ensure all proposed PG&E rate switches occur as planned~~				
	Update system production and economic models based on final installation configuration	1			
	Review and approve acceptance testing and performance test plans and reports	1			
	Technical oversight, observation, and inspection to ensure proper testing of solar plant, DAS, and monitoring system	1			
	Monitoring of production data during proving period	1			

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Task	Activity	Task Owner*		NAM Effort	
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Project Closeout	Review of as-built documentation, drawings, test reports, and certifications		1	32	$5,600
	Advise on punch-list completion for solar PV activities	2	1		
	Provide final project acceptance recommendations	2	1		
	Assist with closeout		1		
	Assist with interconnection process	1			
Performance Management	System monitoring solution testing and validation	1		30	$5,250
	~~EMS-PV monitoring data interface testing and troubleshooting~~				
	~~Reconciliation of performance monitoring, PG&E bills and CSI~~				
	Validate canned report suite and ad hoc reporting capabilities	1			
Direct Costs**	Travel expenses, conference calls	n/a			$825
TOTAL* **				**714**	**$231,125**

**1 = lead role; 2 = support role*

***Direct Costs to be billed to District at cost without markup*

****Includes NAM sub consultants*

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