VALLEY CLEAN ENERGY ALLIANCE

Staff Report – Item 16

то:	Valley Clean Energy Alliance Board of Directors
FROM:	Mitch Sears, Interim General Manager Gary Lawson, Sacramento Municipal Utility District (SMUD)
SUBJECT:	Long Term Renewable Solicitation Short List (Information)
DATE:	April 11, 2019

The purpose of this report is to provide a status update on VCE's long term renewable solicitation.

BACKGROUND/ANALYSIS

VCE's Long-Term Renewable Solicitation

On July 12, 2018 the VCE Board approved the VCE Integrated Resoure Plan (IRP) and the associated Action Plan that serves to implement the IRP. A key action in the Plan was to intiate a long term renewable energy procurement solicitation in late Summer of 2018. The IRP is located at:

<u>https://valleycleanenergy.org/wp-content/uploads/VCEA-2018-IRP.pdf</u> (note: the Action Plan is included in the IRP beginning on pg 25).

Based on the direction provided by the VCE Board in approving the IRP, SMUD, on behalf of VCE, issued a solicitation in August 2018 to procure long term renewable power supply. Responses to the solicitation, which were received on September 17, 2018, included proposals from 13 developers for 32 projects, of which 23 were unique (some developers bid variants of the same project).

Pass/Fail Consideration

After compiling and consolidating the technical details from each response, projects were evaluated for Pass/Fail criteria. VCE made clear in the solicitation that projects, at a minimum, had to satisfy certain criteria to even be considered. Those criteria with effective pass/fail scoring included:

Criteria	Pass/Fail Threshold			
Siting	Projects cannot be proposed for land with a			
	prime agricultural designation.			
	Projects cannot be proposed for areas that			
	are designated as Renewable Energy			

Table 1. Pass/Fail Criteria

	Transmission Initiative ("RETI") Category 1 o 2. Category 1 lands are those identified where development is prohibited by law or policy. Category 2 lands are those where cultural or environmental conflicts would be highly likely and/or controversial.			
Development Status	Projects have to at least have filed a permit application with the relevant land use authority and received an acknowledgment of the filing from such authority. Projects have to provide evidence of site control.			
Out-Of-State Resources	Projects have to be located within California.			
Interconnection Status	Projects must already be in an interconnection gueue and have requested			
	full capacity deliverability for the project interconnection.			

6 Projects did not make it through the pass/fail: 2 were proposed to be sited on RETI Category 2 lands; 1 did not request full deliverability with its interconnection request; 1 was out-of-state; 1 had not submitted for a permit; and finally, 1 was deemed non-compliant for not providing a fixed price bid.

Table 2 below shows a summary of the bids received by technology and the bids that made is past the pass/fail criteria.

	Unique	Projects Bid	Projects Meeting "Pass" Criteria			
Renewable Technology	#	Capacity	#	Capacity		
Photovoltaic	18	941.4 MW	16	900.4 MW		
Geothermal	1	9.0 MW	0	0.0 MW		
Small hydroelectric (30 MW or less)	1	5.5 MW	1	5.5 MW		
Wind	3	103.5 MW	0	0.0 MW		
Total	23	1059.4 MW	17	905.9 MW		

Table 2. Bid Summary

Preliminary Screening

The next step was to perform a preliminary screening that was used to reduce the project list to a limited number of projects that would then receive an economic evaluation and consideration for a short list. In the preliminary screening, projects were ranked. Ranking criteria included:

Permit progress Status of Cultural/Environmental surveys Whether or not sensitive cultural or habitat resources were identified CEQA status Whether wildlife permits were needed and obtained Location of project (northern California preferred) Whether the project was local, regional or other Whether project could be online and delivering energy by April 1, 2021

Only the highest ranked 9 projects were selected to move on to the short list evaluation stage.

Short List Evaluation

Economic evaluations were performed on the 9 projects, where the levelized contract prices were compared to expected value from sales of the power component back to the CAISO and resource adequacy capacity value. The result of the economic evaluations was to determine an implicit renewable premium for each project. The short term renewable PCC1 contracts that VCE has in its portfolio have an average renewable premium of \$15.73/MWh for 2019 deliveries. Many of the projects bid to VCE had prices low enough that the implicit renewable premiums are negative, meaning the cost is lower than the sum of the expected energy and capacity values.)

Key factors in determining which projects to short list were:

At least one project selected could deliver any significant energy in 2020.
Whether total energy delivered from all selected projects will meet the legal requirement for significant energy under long term contract in 2021.
Price (value)
Selection of projects to supply at least the VCE minimum 42% renewable content in 2021 (and beyond).

Short List Selection

Two projects have been selected for short listing, a 72 MW solar project, and a 40 MW solar project. Neither of the projects are considered either Local or Regional projects by VCE's definition. They both were selected for the following key reasons: The two projects provided a renewable volume totaling at least 42% of VCE overall energy portfolio starting in 2021; one of the two project will begin deliveries in 2020 in time to meet the deminimis long term contracting requirement in the 3rd RPS compliance period (2017 – 2020); Both projects had favorable pricing. No other combination of projects provided enough energy in 2021 to satisfy the RPS minimum long term contracting requirements which begin in 2021.

One of the projects is connected to PG&E's system, and the other project is connected to SDG&E's system.

The expected commercial operation date of one project is 10/1/2020, and the second is 1/1/2021.

Table 3 below shows how the expected energy production from the projects impacts VCE's renewable portfolio. Additionally, Table 3 shows the aggregate net implicit renewable premium. The negative amount shown indicates how much less the project power costs than the expected market price of brown power. Keep in mind that the current premium we pay for VCE's short term renewables is a positive \$12.40/MWh. Thus the expected savings over current renewable costs is \$16.20/MWh).

	PPA Capacity	2019	2020	2021	2022	2023	2024
Total Supply	112 MWs	0	37,915	326,203	326,203	326,203	327,108
VCEA Load		682,411	685,357	729,467	733,114	736,779	740,463
Incremental Contribution to Renewable Content		0%	6%	45%	44%	44%	44%
Implicit Combined Premium			\$ (3.79)	\$ (3.79)	\$ (3.79)	\$ (3.79)	\$ (3.79)

Table 3. Portfolio Impacts of Short Listed Projects

Remaining Solicitation Process

Staff will be completing the short-listing process, which includes executing letters of intent, collecting short list deposits and setting up meetings with the respective project developers. The parties will then begin Power Purchase Agreement negotiations.

Staff is targeting having negotiations completed and agreements presented to the Board for approval at the June 13, 2019 meeting.

DISCUSSION

Finally, when staff comes to the Board for approval of the resulting Power Purchase Agreements, staff is planning on proposing a recommendation to the Board to proceed with Local renewable procurement efforts to add additional renewable resources to VCE's portfolio such that it can achieve a 60% renewable portfolio content well in advance of the state mandated date of 2030.