

VALLEY CLEAN ENERGY ALLIANCE

Staff Report – Agenda Item 8

TO: Valley Clean Energy Alliance Community Advisory Committee

FROM: Mitch Sears, Interim General Manager

SUBJECT: Integrated Resource Plan - Prioritization of Action Plan Activities for Years 1-3

DATE: May 30, 2018

RECOMMENDATION

Receive draft lists of activities related to the VCE Integrated Resource Plan and provide comments/feedback.

BACKGROUND

VCE is required by the California Public Utilities Commission (CPUC) to prepare an Integrated Resource Plan (IRP), for the supply of energy in the period from 2018 to 2030. The objective of the IRP is to provide guidance for VCEA's Board, executive management, and the public regarding the relative power supply cost impact of various long term resource options for meeting electric demand in the 2018-2030 period and to ensure that these options are strategically aligned with VCEA's short and long term vision.

The 1 to 3 year Action Plan outlines the actions VCE plans to take to achieve the goals and objectives set out in the IRP. As noted during the IRP Workshop held by the Advisory Committee on April 26th, the Action Plan can but is not required to include additional actions contemplated by VCE to achieve its short and long term vision.

At the conclusion of the IRP Workshop, Committee members were asked to participate in a "homework assignment" review of the initial draft list of Action Plan items developed by staff. Staff requested that Committee members edit/add/delete and prioritize the list for discussion at the May Committee meeting. Three Action Plan draft lists are attached to this report: (1) an updated and prioritized staff list, (2) a draft list prepared by Committee members Braun and Kristov related to possible wholesale energy business related actions, and (3) a list of possible clean local energy resource related action steps prepared by Committee members Braun and Kristov. Note: Committee member Braun noted in his transmittal for the third list that it is lengthy and may not be in its entirety within VCE's current capacity to address. He indicated that both lists were included since they relate to different aspects of VCE's activities: List 1 wholesale power procurement and List 2 long term vision (i.e. local clean energy and resilience).

For the May 30th meeting, staff is requesting that Committee members review and be prepared

to provide feedback on the lists and how the actions might be prioritized. This feedback will help staff prepare a recommended final draft IRP 1-3 year Action Plan for consideration by the Committee at its meeting in June.

Attachments

1. Staff IRP Action Plan Activities for Years 1-3
2. Committee IRP List of Wholesale Energy Business Related Actions (Braun/Kristov)
3. Committee List of Clean Local Energy Resource Related Action Steps (Braun/Kristov)

VCEA Integrated Resource Plan

Listing of Possible Action Plan Activities/Proposed Prioritization

5/25/18

Priority	Title	Description
1	Long Term Renewable Procurement	<p>Conduct a solicitation and evaluation of proposals for the purchase of energy from existing or new RPS qualifying renewable energy resources.</p> <p>Additional Related Action Plan:</p> <ol style="list-style-type: none">1. Develop criteria/information requests to evaluate new renewable for projects implementing responsible siting practices (both environmental and land use). Develop associated evaluation criteria.2. Develop Criteria for Acceptable renewable technologies.3. Develop position on defining limits on which states to procure long term renewables from.4. Develop a position on the definition of "local" for renewable resource procurement.5. Determine whether to include (or not) battery storage options in solicitation.<u>6. Develop criteria for assessing the portfolio content of local versus non local for short-list selection.</u>

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Listing of Possible Action Plan Activities/Proposed Prioritization

5/25/18

Priority	Title	Description
2	Establish Renewable and GHG Targets for 2030	<p>Conduct studies to evaluate in more detail the costs and ability of VCEA to achieving greater than 50% RPS by 2030, when carbon neutrality might be able to be achieved. Establish the LT Targets for VCEA.</p> <p>Additional Related Action Plan:</p> <ol style="list-style-type: none"> 1. Assess whether VCEA should bifurcate its portfolio to meet the varying sustainability goals of its Members. 2. Conduct Document review of other entities' climate action plans to inform on extent of aggressive goals established by other entities. 3. <u>Develop policy proposal for tradeoffs between costs, GHG emissions, local renewable content, etc.</u>
3	Key Portfolio Performance Indicators	Develop a list of desired metrics to track aspects of the portfolio performance relative to a baseline/comparison metric.
4	Evaluate Impacts of Climate Change on Load Forecast	Evaluate methods for incorporating the impacts of climate change on expected future loads (particularly peak loads).
5	Evaluate Options for Assuming Responsibility for Energy Efficiency/Demand Side Programs from PG&E	Evaluate the scope of effort to assume control of CPUC/regulatorily required energy efficiency and demand side management programs.
6	Evaluate Non-Battery Storage Options	Investigate other storage technologies and their cost effectiveness.

VCEA Integrated Resource Plan

Listing of Possible Action Plan Activities/Proposed Prioritization

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Logic for Proposed Prioritization

Priority	Title	Description
1	Long Term Renewable Procurement	This is the highest priority because of the need to get long term contracts in place so long-term renewable supply from these can begin in or prior to 2021. A task for this long term procurement process has been signed.
2	Establish Renewable and GHG Targets for 2030	Determining VCEA's long term goals is important to inform the procurement effort on what level of procurements above minimum levels will be required as part of the long term renewable procurement process. This would involve additional analysis.
3	Key Portfolio Performance Indicators	This is probably not a lengthy discussion. In addition, KPPIs can evolve over time. A few of the KPPIs would relate to the 2030 targets established.
4	Evaluate Impacts of Climate Change on Load Forecast	This would primarily be a literature research and review on forecast local climate impacts over time. Then would need to determine how to incorporate climate change impacts into the actual load forecasting process.
5	Evaluate Options for Assuming Responsibility for Energy Efficiency/Demand Side Programs from PG&E	Assuming operational responsibility for these programs from PG&E is a long-term proposition. The opportunity will remain
6	Evaluate Non-Battery Storage Options	Many non-batter storage options are likely to be customer-sited, which means that they will fit into the demand response category. VCEA initiating responsibility for demand response programs is a longer-term proposition.

VCEA Integrated Resource Plan

Listing of Possible Wholesale Electricity Procurement Related Action Plan Activities

Comments by Gerry Braun and Lorenzo Kristov * 5/8/18

Priority	Title	Description
1	Long Term Renewable Procurement	<p>Conduct a solicitation and evaluation of proposals for the purchase of energy from existing or new RPS qualifying renewable energy resources.</p> <p>Additional Related Action Plan:</p> <ol style="list-style-type: none">1. Develop criteria/information requests to evaluate new renewable for projects implementing responsible siting practices (both environmental and land use). Develop associated evaluation criteria.2. Develop Criteria for Acceptable <u>and Preferred</u> renewable technologies <u>and locations (e.g., local v. remote)</u>.3. Develop <u>criteria and</u> position on defining limits on which states to procure long term renewables from.4. Develop a position on the definition of “local” for renewable resource procurement.5. Determine whether to include (or not) battery <u>or other</u> storage options in solicitation.
Not Assigned	Evaluate Impacts of Climate Change on Load Forecast	Evaluate methods for incorporating the impacts of climate change on expected future loads (particularly peak loads).

VCEA Integrated Resource Plan

Listing of Possible Wholesale Electricity Procurement Related Action Plan Activities

Comments by Gerry Braun and Lorenzo Kristov * 5/8/18

Priority	Title	Description
	<u>Evaluate impacts of electrification on load forecast</u>	<u>Evaluate methods for incorporating electrification initiatives (e.g., all electric buildings, clean local mobility services, ag pumping conversion) on expected future loads (load profiles as well as peak loads).</u>
Not Assigned	Evaluate Non-Battery Storage <u>and Demand Response</u> Options	Investigate <u>demand response program options and other non-battery storage technologies and their cost effectiveness.</u> <u>1. Identify trends that may impact VCEA’s long term demand forecast and/or load shifting opportunities</u> <u>2. Determine program options or investments consistent with market and technology trends and cost of service goals.</u>
Not Assigned	Evaluate Options for Assuming Responsibility for Energy Efficiency/Demand Side Programs from PG&E	Evaluate the scope of effort to assume control of CPUC/regulatorily required energy efficiency and demand side management programs, <u>and what kinds of programs VCEA would implement if we get control.</u>

VCEA Integrated Resource Plan

Listing of Possible Wholesale Electricity Procurement Related Action Plan Activities

Comments by Gerry Braun and Lorenzo Kristov * 5/8/18

Priority	Title	Description
Not Assigned	Establish Renewable and GHG Targets for 2030	<p>Conduct studies to evaluate in more detail the costs and ability of VCEA to achieving greater than 50% RPS by 2030, when carbon neutrality might be able to be achieved. Establish the LT Targets for VCEA.</p> <p>Additional Related Action Plan:</p> <ol style="list-style-type: none">1. Assess whether VCEA should bifurcate its portfolio to meet the varying sustainability goals of its Members.2. Conduct Document review of other entities' climate action plans to inform on extent of aggressive goals established by other entities.
Not Assigned	Key Portfolio Performance Indicators	<p>Develop a list of desired metrics to track aspects of the portfolio performance relative to a baseline/comparison metric.</p>

VCEA Integrated Resource Plan

Listing of Possible Integrated Local Energy Related Action Plan Activities

Comments provided by Gerry Braun and Lorenzo Kristov * 5/25/18

Priority	Title	Description
	Five-year Business Plan	<ol style="list-style-type: none">1. Five year income statement, cash flow and reserve forecasts, balance sheet.2. Planned new product offerings and related revenue targets, e.g. EV charging product; solar+storage adoption incentives.
	Green Metrics	<ol style="list-style-type: none">1. Review energy city and county level electricity, natural gas and total usage, net energy metered solar and energy-related GHG emissions information PG&E makes available to local jurisdictions in its service area.2. Summarize strategic implications of key VCEA member jurisdiction trends as well as the implications for future VCEA IRPs of actions identified in their climate action adaptation plans.3. First annual report summarizing actual vs. forecasted electricity usage and load profiles
	Local Economic Impacts	<ol style="list-style-type: none">1. Review San Jose area CCA economic impact analysis2. Determine valid methodology for evaluating economic benefits of local clean energy resource deployment in VCEA jurisdictions.3. Develop criteria and recommend targets for balancing out of service area resources and in-service area resources.

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Listing of Possible Integrated Local Energy Related Action Plan Activities

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Priority	Title	Description
	Energy Justice	Identify energy justice concerns in VCEA service area and potential VCEA strategies to benefit affected families and communities.
	Solar Plus Storage	<ol style="list-style-type: none">1. Identify cost forecasts for on-site, community and utility-scale solar and battery storage as well as integrated utility scale wind and storage.2. Develop criteria to evaluate options and make longer term decisions, e.g. preferred long-term mix of storage coupled and stand-alone storage for on-site, in-service area and outside service area deployment.
	Electrification	<ol style="list-style-type: none">1. Evaluate the economic and carbon-reduction implications of alternative heating end use decarbonization scenarios, including retrofit programs as well as new construction.2. Evaluate economic and carbon-reduction implications of clean alternative mobility options to reduce use of private vehicles.

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Priority	Title	Description
	Electric Vehicles	<ol style="list-style-type: none">1. Estimate electricity demand and greenhouse gas impacts of EV deployment and VMT (vehicle miles traveled) trends in the VCEA service territory.2. Evaluate related early related demand response uses.3. Evaluate future potential load leveling and energy security uses.4. Evaluate EV charging incentive programs offered by other CCAs, e.g. SCP.
	Community Solar	<ol style="list-style-type: none">1. identify inventory of potential sites in the service area, including and esp. brownfield sites.2. Consider possible pilot program or project for Davis rental and multi-family customers.3. Evaluate longer term program design options.
	Net Zero	<ol style="list-style-type: none">1. Estimate, collect related data and confirm/adjust estimates of the impacts of new housing developments under the new state standard for net zero electricity, including affect on incentives for all-electric buildings.2. Determine rate options consistent with equitable cost recovery and expected timing of net supply and net usage.

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Priority	Title	Description
	Efficiency/Other Customer-facing Programs	<ol style="list-style-type: none">1. Review programs offered by PG&E and other CCAEss.2. Identify best fits for VCEA jurisdictions.
	R&D	<ol style="list-style-type: none">1. Create initial list of state and Federal programs and pending grant opportunities, and develop criteria for choosing ones that are good fit for VCEA or a member jurisdiction.
	Local Clean Energy Businesses	<ol style="list-style-type: none">1. Create a list of clean energy businesses operating in the service territory for possible use in responding to customer inquiries.2. Identify needs and opportunities for new clean energy businesses that could accelerate decarbonization/electrification/efficiency cost effectively.
	Integrated Energy Analysis	<ol style="list-style-type: none">1. Review (and update?) DavisFREE integrated energy analysis and main report.2. Determine future analysis needs for other jurisdictions.
	Climate Action	<ol style="list-style-type: none">1. Develop an outline for energy sections of VCEA jurisdiction CAAPs2. Convene meeting to discuss CAAPs with jurisdictions and possibly UC Davis.3. Identify potential linkages and synergies between VCEA programs and city/county general plans and CAAPs.

VCEA Integrated Resource Plan

Listing of Possible Integrated Local Energy Related Action Plan Activities

Comments provided by Gerry Braun and Lorenzo Kristov * 5/25/18

Priority	Title	Description
	PG&E Coordination	1. Recommend priorities for VCEA and member jurisdiction engagement with PG&E.
	Demand Forecasts	1. Initiate demand forecasting specific to member jurisdictions.
	Environmental Standards	1. Recommend environmental guidelines for projects supplying electricity to VCEA.