



## Item 8 - Review and Discuss PG&E's Residential Time of Use Proposal

VCE CAC Meeting, Thursday, July 25, 2019 in Woodland



**VALLEY**  
CLEAN ENERGY

# Item 8 - Needed Recommendations

1. Should VCE adopt PG&E's residential time of use rates?
2. Should VCE adopt Bill Protection for the first year of RTOU?

# Item 8 - Eligible Customers

- Customers on the E1 rate are the focus of RTOU
- VCE has 42,500 customers on E1
- 10,700 customers on CARE, FERA or MED
- Estimate 20,000 (47%) customers that are eligible for RTOU
- Difference comes from other eligibility requirements—12 months worth of data, etc.

# Item 8 - Transition Exclusions

Exclusions	Purpose
Medical Baseline Customers	Avoid a potential negative impact with a sensitive customer
Vulnerable Customers	Avoid a potential negative impact with a sensitive customer
Third Party Notifications	Notifications are sent to a 3 <sup>rd</sup> party and not guaranteed to reach the energy user
Customers with less than 1 year of service	Inability to perform a full rate comparison with less than 1 year of service
CARE/FERA Customers in hot climate zones (All VCEA CARE/FERA Customers)	Avoid a potential negative impact with a sensitive customer
CARE/FERA <u>Eligible</u> customers in hot climate zones	Avoid a potential negative impact with a sensitive customer
Transitional Bundled Service (Customers on market or transitional bundled rate – occurs when a VCEA customers returns to PG&E)	Inability to perform Bill Protection calculation & confusing customer experience
Advanced Billing System Billing (ABS Billing)	Inability to perform Bill Protection calculation
Customers with inadequate interval meter data	Inability to provide a full rate comparison
Active Severance Customers	Avoid a potential negative impact with a sensitive customer
Billing Cycle Changes	Bill cycle changes could result in a customer missing a notification or receiving a notification late
Customers who convert from NEM to Non-NEM	Bill Protection complexity

**PG&E**  
outperformed  
other IOUs in  
overall load  
drop and in  
hot and  
moderate  
climate zones

Segment	Load Drop % Impact		
	PG&E	SCE	SDG&E
Hot	5.2%	2.0%	3.6%
Moderate	4.3%	1.3%	1.7%
Cool	1.4%	1.5%	1.2%
All	4.0%	1.5%	1.5%

# Item 8 - SMUD RTOU Results

- Current SMUD RTOU rates have not been in place through a complete summer, so peak load impacts have not been determined
- A pilot completed in 2014 yielded the following:

**Table 1-2: Peak Period Load Reductions for All Pricing Plans**

Group	CPP Day Impacts			Average Weekday Impacts		
	Impact	Reference Load	% Impact	Impact	Reference Load	% Impact
Opt in TOU, IHD Offer	0.32	2.38	13.3%	0.21	1.79	11.9%
Opt in TOU, No IHD Offer	0.23	2.24	10.1%	0.16	1.72	9.4%
Opt-in CPP, IHD Offer	0.64	2.53	25.1%	n/a	n/a	n/a
Opt-in CPP, No IHD Offer	0.49	2.33	20.9%	n/a	n/a	n/a
Default TOU, IHD Offer	0.15	2.47	5.9%	0.11	1.86	5.8%
Default CPP, IHD Offer	0.36	2.56	14.0%	n/a	n/a	n/a
Default TOU-CPP, IHD Offer	0.31	2.54	12.3%	0.17	1.91	8.7%



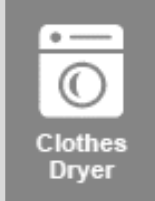
# TOU transition customers have shifted and/or reduced usage

47  
%

overall say they have **shifted (35%)** and/or **reduced (24%)**

All who have shifted or reduced

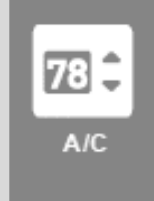
Top  
actions



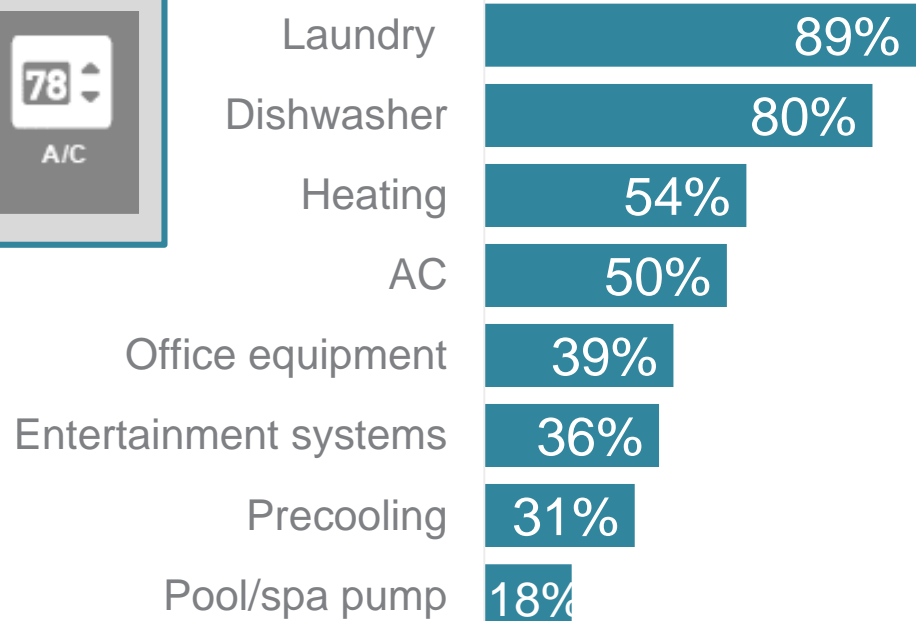
Clothes  
Dryer



Dishwasher



A/C



# Item 8 - Customer Notifications

- 90 day (see rate comparison below)
- 30 day
- 30 day Email notice
- Post-transition welcome notice
- 11 month Bill Protection notice

## Your Personalized Electric Rate Plan Comparison

This report is based on your last 12 months of electricity usage and assumes no change to how you use energy. Estimates do not include gas.

<b>Your Rate Plan Options</b>	<b>Current Rate Plan</b> Tiered (E-1) <hr/> Two pricing levels based on monthly usage. Price does not vary by hour of the day.	<b>Transition Rate Plan</b> Time-of-Use (Peak Pricing 4–9 p.m. Every Day) <hr/> Higher prices 4-9 p.m. every day. Lower prices at all other times.	<b>Optional Rate Plan</b> Time-of-Use (Peak Pricing 5–8 p.m. Weekdays) <hr/> Higher prices 5-8 p.m. on weekdays. Lower prices at all other times.
<b>Total Electricity Costs*</b>	\$765/year	\$720/year	\$700/year

Your lowest cost rate plan is: <Lowest cost rate plan>



# Item 8 - Time Commitment

- VCE has rate setting authority and can set it's own rates at any time
- CCAs generally link to PG&E rates because its easier for customers to understand

# Item 8 - CCA Decisions To-Date

- Redwood Coast Energy Authority and East Bay Community Energy have approved
- Staff recommendations in favor of RTOU have come from:
  - Sonoma Clean Power
  - Peninsula Clean Energy
  - Silicon Valley Clean Energy
  - MCE
- Other CCAs seem favorable, but have not made firm commitments

# Item 8 - Next Steps

- Draft recommendations prior to next CAC meeting, August 22
- Hold public meeting as part of next CAC meeting
  - PG&E to present
- After the public meeting--
  - Discuss public input
  - Approve draft recommendations or
  - Revise and approve updated recommendations



# Item 9 - Potential local energy and efficiency programs

July 25, 2019



# Item 9 - Agenda

- Intro
- Sample utility programs
- Key concepts
- Program ideas
- Next steps

# Item 9 - Programs - mission alignment

- **At Valley Clean Energy, our mission is to**
    - deliver clean electricity
    - product choice
    - greenhouse gas emission reductions
- all with local control at competitive prices.

# Item 9 - EV Programs

Electric Vehicle Utility Programs

Utility	Program Name	Target Audience	Incentives	Description	Additional Information
PG&E	Clean Fuel Rebate	Residential	\$ 800	Available to new EV owner for using electricity as a clean fuel.	Additional EV incentives are available from the State--\$1500-\$2500, and federal tax credits--\$2500-\$7500.
	EV Fleet	Med/Large Business	Yes	Provide major assistance and cost share to install EV charging infrastructure at fleet locations. Can be customer-owned or PG&E owned.	
	EV Charge Network	Business	Yes	Install charging infrastructure at locations with 10 or more chargers (Muir Commons). Program currently closed.	
SCE	Clean Fuel Reward	Residential	\$ 1,000	Available to new EV owner for using electricity as a clean fuel.	SCE pushes other available incentives--State, Fed, SCAQMD, etc. Must operate infrastructure for 10 years. Must be networked and able to respond to DR events.
	Charge Ready	Business	Yes	Install EV infrastructure--wiring, panels--everything except the chargers for installation of 10 or more (5 in low income areas).	
SDG&E	Champions for Clean Air	Teachers and First Responders	\$ 1,000	\$1000 rebate for EV purchase by teachers and first responders.	Program fully subscribed. No funds currently available.
	Power Your Drive	Multifamily	Yes	Provided low cost charger installations in multifamily developments.	
SMUD	Free Fuel for a Year	Residential	\$ 599	Incentive is supposed to equal one year's worth of fuel. Can take a Level 2 charger instead of cash.	Partnered with Center for Sustainable Energy and the CEC. Partnered with Center for Sustainable Energy and the CEC.
	Charging Forward	Business	\$ 6,500	Up to \$6500 per connector for Level 2 Chargers.	
	Charging Forward	Business	\$ 80,000	Up to \$80,000 for DC fast chargers.	
LADWP	Charge Up LA!	Residential	\$ 500	Rebate for installation of Level 2 charger.	
	Used EV rebate	Residential	\$ 450	Provide rebate for purchase of used EV.	
MCE	Income Qualified EV Rebate	Residential	\$ 3,500	Focused on low income households. Must meet income guidelines to qualify.	Bonus of \$500 if meter is on 100% renewable offering. Combined with PG&E rebates. \$575-\$725 from MCE not to exceed \$2300.
	MCEv Charging	Multifamily	\$ 3,000	Pay \$3k/port for 2-20 ports in MF	
	EV Charge Network	Workplace and multifamily	\$ 2,300	10 or more charging ports, \$1150-\$2300 incentive	
Sonoma CP	Free Charger	Residential		Pay for charger, customer pays for installation.	Program linked to their demand response program, GridSavvy. Website highlights state, federal and PG&E rebates also.
Peninsula CE	PCE DriveForward Electric EV Charging Equipment Incentives	Residential Res/Biz	\$ 4,000	Used EV rebate for low/moderate income residents of San Mateo County only. EV Charger installations. \$16M budget, but no program yet.	

# Item 9 - CCA electric vehicle approach

- Act as a conduit for state incentives and federal tax credits, informational hub for potential EV owners
- Have direct incentives
  - Ex: Peninsula offers \$4,000 rebate for households to buy a new or used plug-in hybrid
- Work with local Air Quality and local governments to apply for CALeVIP funding for workplace and multi-unit dwelling EV infrastructure



# Item 9 - CCA Programs

	Clean Power SF	Lancaster Choice Energy	Peninsula Clean Energy	Marin Clean Energy	Sonoma Clean Power	East Bay Community Energy	Silicon Valley Clean Energy	Pioneer	PRIME	Redwood Coast Energy Authority	Solana Energy Alliance	Monte Rey Bay Community Power	Clean Power Alliance	San Jose Clean Energy
Budget Billing	<i>In dev.</i>	✓			<i>In dev.</i>									
Battery Storage Rate	<i>In dev.</i>			✓										
Customer Load Shifting	<i>In dev.</i>			✓	✓									
Demand Response			<i>In dev.</i>	<i>In dev.</i>	<i>In dev.</i>	<i>In dev.</i>	✓			✓				
EV Rate	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	2019
EV Bus Program		✓												
EV Incentives		✓	✓	✓	✓							<i>In dev.</i>		2019-20
EV Load Shifting				✓	✓									
Energy Efficiency		<i>In dev.</i>		✓	✓				<i>In dev.</i>	✓				
Low-Income & Multifamily EE				✓					✓	✓				
Feed-In Tariff	<i>In dev.</i>			✓	✓					<i>In dev.</i>		<i>In dev.</i>		
Fuel Switching				✓	✓		<i>In dev.</i>			✓		<i>In dev.</i>		2019-20
Low Income Solar Incentives	✓		<i>In dev.</i>	✓		2019			✓			✓		
On-Bill Repayment	<i>In dev.</i>			✓	<i>In dev.</i>									
Community Outreach Grants			✓			✓	✓	<i>In dev.</i>						
Microgrid Development		✓						✓				✓		

# Item 9 - A few CCA initiatives

- **Sonoma Clean Power Grid-Savvy program:**
  - Partnered with E-motorWorks
  - Provides free smart charger (after rebate) to any qualifying customer
  - Customers save \$5/month on their bill if they participate
- **East Bay Community Energy:**
  - Leading utility-scale storage with PG&E
  - Recently announced contract for 325 MW of renewables plus 57.5 MW of storage

# Item 9 - CCA/muni initiatives

- Sonoma Clean Power and MCE -Advanced Energy Rebuild program
  - Leverages IOU and AQMD funds to provide incentives for homeowners rebuilding after the 2017 wildfires
  - Provide \$7,500 for certain electrification and efficiency enhancements during rebuild, or \$12,500 for all-electric homes
- SMUD electrification program
  - Up to \$5,000 for new homes
  - Up to \$1,750 for multifamily
  - Up to \$13,750 for retrofit

# Item 9 - Key concepts

- Leverage funding
  - Add incentives to other incentive programs to promote higher levels of participation
  - Develop incentives around the SACOG grant
- Coordination/collaboration/partnerships
  - Joint programs with other CCAs
  - Leverage brain trust of other agencies—UCD, national labs, CAC, others
  - Partner with other entities on programs/projects/pilots
- Education

# Item 9 - Key concepts

- Look for low/no-cost measures
  - Several utilities promote electric vehicles and advertise state incentives, federal tax credits and other benefits
- Apply for relevant grants
  - EV charging infrastructure on private property
  - DER grants - storage, microgrid
  - Ag grants
  - Let someone else act as prime to reduce admin

# Item 9 - Program ideas

## 1. Electrification initiatives

- Incentives—electric homes/businesses
- Promote local govt policies (Berkeley)
- Pilot projects

## 2. Electric Transportation

- Level 2 charger incentives—multifamily, biz, home
- DC fast charger incentives
- EV incentives

# Item 9 - Program ideas

## 3. Load shaping (Resource Adequacy cost reduction)

- Energy storage—customer owned/utility scale/storage shares
- Demand response initiatives
- Managed charging

## 4. Energy efficiency

- Increased incentives for certain measures
- Possible new measures
- Leverage existing programs/incentives

# Item 9 - Next Steps

- CAC to discuss potential program ideas—
  - Near term - <1 year, low/no cost
  - Mid term - 1-2 years, low cost
  - Long term - >2 years, depends on budgets
- Develop recommendations over 6 month window
- Request additional information from staff if needed
- Staff to provide updates





**Item 10: Integrated Resource Plan/Strategic Plan  
Schedule and Initial Considerations  
CAC Meeting – July 25, 2019**

## Item 10: IRP/Strategic Plan Coordination Overview

- A VCE strategic plan would align our initiatives with the organizational vision, mission, and values. This plan will be designed to recognize the goals VCE intends to accomplish and highlight strategies and tactics it will employ to achieve these goals.
- IRPs are electricity system planning documents required by the CPUC intended to ensure that Load Serving Entities (LSE's) like VCE lay out the resource needs, policy goals, physical and operational constraints, and general priorities or proposed resource choices of the CCA. These plans provide a framework to evaluate how LSE's have chosen to align with greenhouse gas emission reduction targets.
- A strategic plan and IRP are related but the scope and purposes are different. Fundamentally the IRP informs the strategic plan.

## Item 10: IRP/Strategic Plan Coordination

- As a plan that guides VCE's overall organizational activities, the VCE Strategic Plan is not subject to a specific development/adoption timeline.
- As a regulatory requirement, the IRP is subject to a specific development timeline (due May 1, 2020).
- Due to the relationship and information cross over between the two documents, VCE Staff plan to align the schedule to develop each.

# Item 10: 2020 Integrated Resource Plan

Approximate timing	Activity
August 16, 2019	2018 Preferred System Plan LSE Progress Status Data Request Due
Aug/Sep, 2019	CPUC staff release proposed data and requirements for 2020 filing
September, 2019	CPUC release of preliminary RESOLVE Reference System Portfolio
October, 2019	CPUC formal release of Reference System Plan
Oct/Nov, 2019	VCE Board introduction/kick-off of VCE IRP Process
December, 2019	CAC and public meeting on IRP scope and scenarios covered
December, 2019	Proposed Decision Released on Reference System Plan
December, 2019	Final templates, tools, and filing instructions released
February, 2020	Commission Decision on Reference System Plan
February, 2020	Draft IRP ready / CAC & Public Review
March, 2020	VCE Board discussion and feedback on draft IRP & CAC Recommendations
April, 2020	VCE Board Adoption of IRP
May 1, 2020	CPUC IRP Filing Due

**Note:** Staff anticipates the strategic planning process will proceed within a similar timeframe. Additional schedule detail will be provided at subsequent CAC mtgs.

# Item 10: Resource portfolio considerations

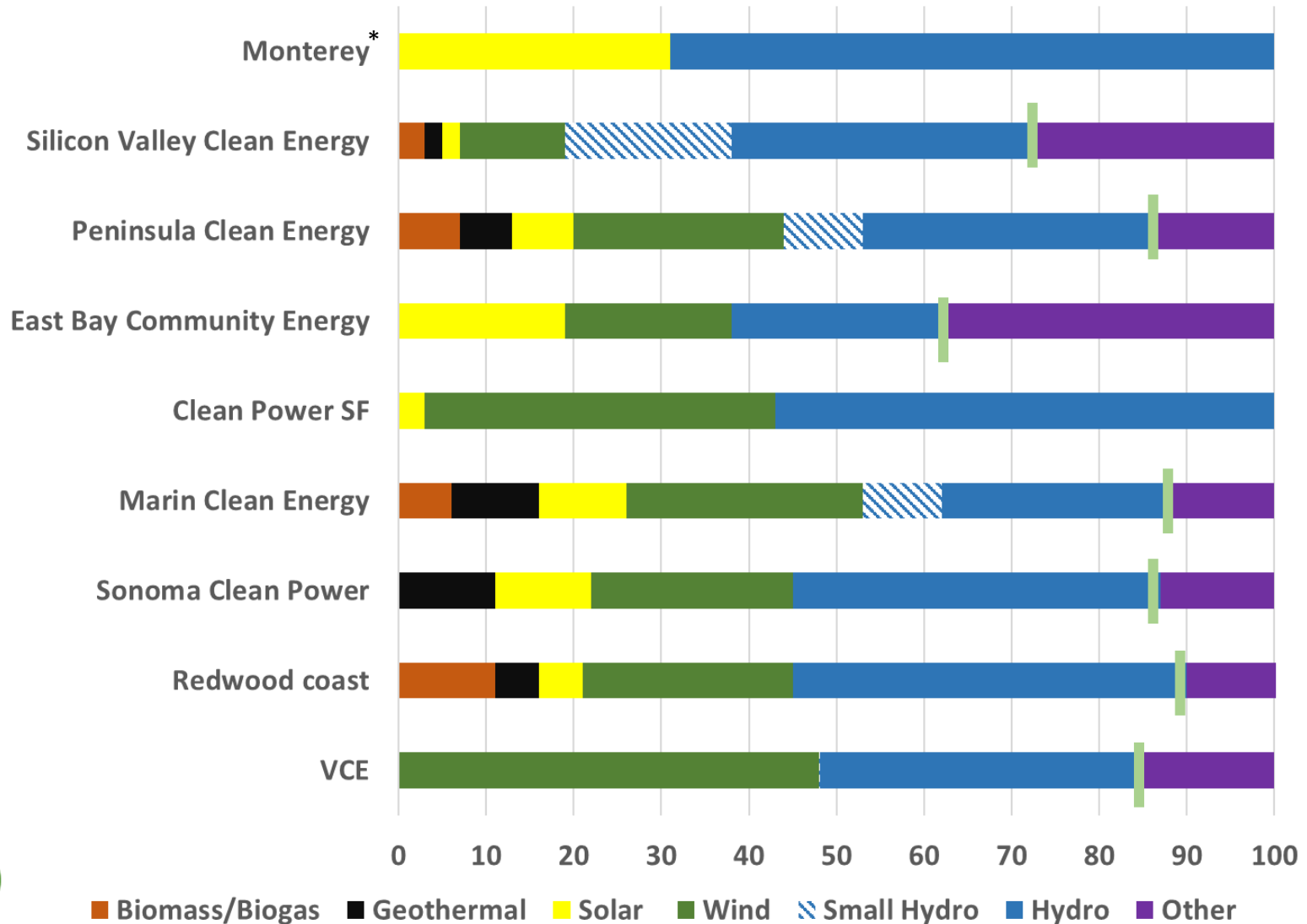
**There are many factors to consider for the resource portfolio of the LSE, making each CCA unique and hard to compare directly to others**

- **Load profile.** Peaky load leads to different supply characteristics than flat
- **Customer demographics.** Residential customers may be less price sensitive and less price-motivated than energy-intensive industrial and commercial operations
- **Risk approach.** Impacts how much and what type of resources are contracted and for what terms and durations
- **Resource preference and cost sensitivity.** Local resources generally more expensive and less available than non-local
- **Vintage and Scale of CCA.** More established CCAs with proven track record and perhaps formal credit rating have better leverage in contracting. Larger CCAs can pursue deals independently
- **Location / RA Needs.** Some areas have higher local resource needs due to local RA requirements
- **Resource potential.** Some areas has potential for more local resources

# Item 10: Snapshot of selected CCAs

CCA	Customer # (000)	RPS (%)	Carbon Free (%)	Storage (MW)	Joint Efforts?	Local
VCE	54.2	42	75	3 MW by 2022		Small hydro
Redwood Coast	62	44	89	Planning Solar+Storage at Humboldt airport	HSU+PG&E for solar+storage microgrid (50% EPIC funded); EDP renewables (Offshore)	Local biomass; offshore wind
SCP	225	48	87	Planning Customer + Grid	Stem (customer sited)	Has local product as option
MCE	470	61	89	1.3MW installed; remainder TBD		Several projects, e.gt. Novato landfill gas; Richmond solar; FIT
CPSF	376	40	100	6.5 MW by 2024		?
EBCE	533	38	62	Announced Solar 100 MW+ Storage 30 MW in Fresno		Alameda solar (57MW)
PCE	293	50	85*	TBD		20 MW local by 2025; local pilot projects
SVCE	270	38	72	150MW solar +45MW storage w Monterey	Joint procurement with Monterey (Kings county)	No. IRP stating intent to issue local RFO
Monterey	277	31	100	150MW solar +45MW storage w SVCE	Joint procurement with SVCE	?

# Item 10: Resource Mix of selected CCAs



\* Estimate based on stated RPS and carbon goals – exact mix not available

Questions?