Peninsula Clean Energy Board of Directors Meeting

October 22, 2020

PENINSULA CLEAN ENERGY

Agenda

- Call to order / Roll Call
- Public Comment
- Action to set the agenda and approve consent items

Regular Agenda

1. Chair Report (Discussion)

Regular Agenda

2. CEO Report (Discussion)

Today's Updates

- Staffing Updates
- Los Banos Update
- COVID-19 Update
  - Load Impact Analysis
- Root Cause Analysis of August Heat Wave
- Power On Peninsula Update
- Reach Codes Update
- Upcoming PCE Meetings

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Staffing Updates

- We currently have one open position for a Manager Data and Technology.

- With continued uncertainty and changing conditions with COVID, PCE staff will continue to work-from-home through July 6, 2021

Los Banos Update

- We are pleased to report that the Los Banos City Council voted to join Peninsula Clean Energy and become a CCA at their council meeting on October 21. Thank you to Carlos Romero for providing additional information at this meeting.

- Welcome Los Banos!

COVID-19 Load Impact Analysis

- Overall PCE load
- Monthly Load Changes
- Load Changes and Shapes by Customer Type

Thank you to the power resources team for this analysis!

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COVID-19 Load Impact Analysis

10/22/2020

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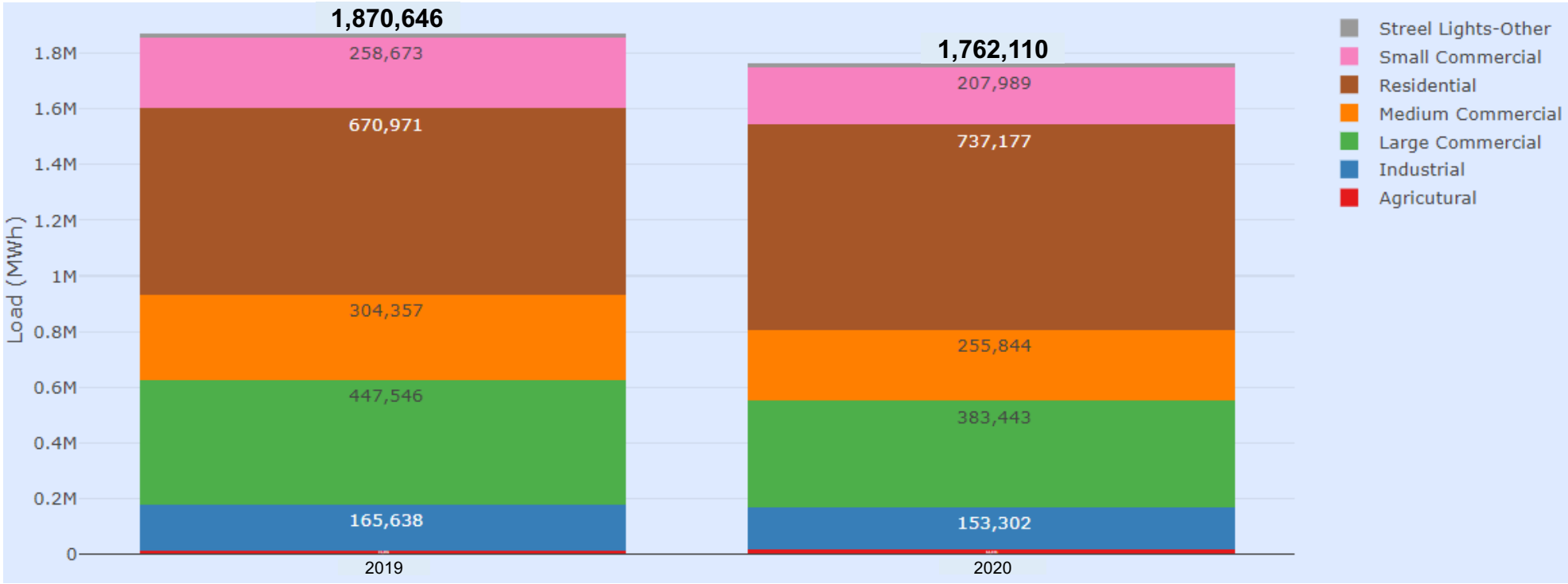
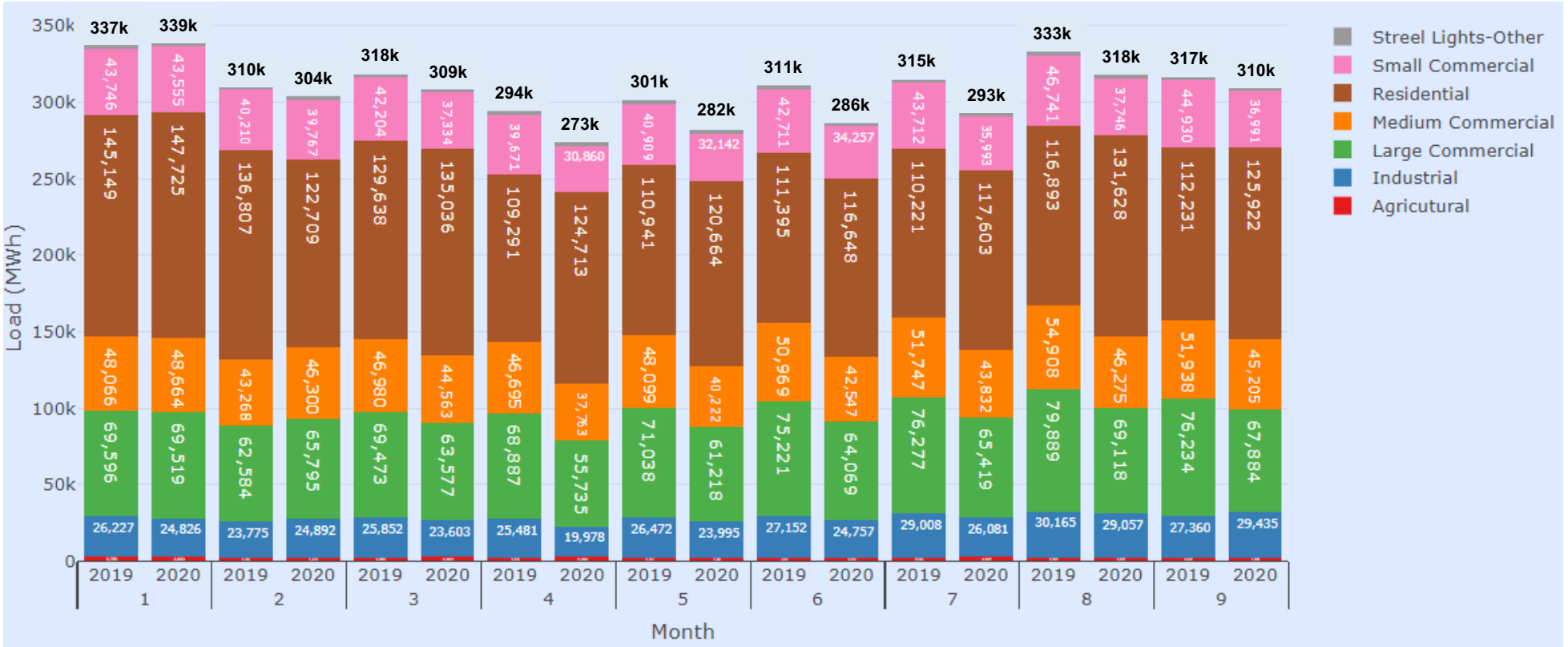
PCE Load after Shelter-in-place order

- April-September 2020 compared to April-September 2019:
  - 6% decrease in Total PCE load compared to same period in 2019.
  - Around 15% decrease in C&I load
  - Around 10% increase in residential load



Monthly Load

- Significant decrease in PCE's monthly load starting March 2020:
  - 4% decrease in March 2020 compared to March 2019
  - 7%, 6%, 8%, 7%, 4%, and 2% decrease in April, May, June, July, August, and September of 2020 compared to same months in 2019



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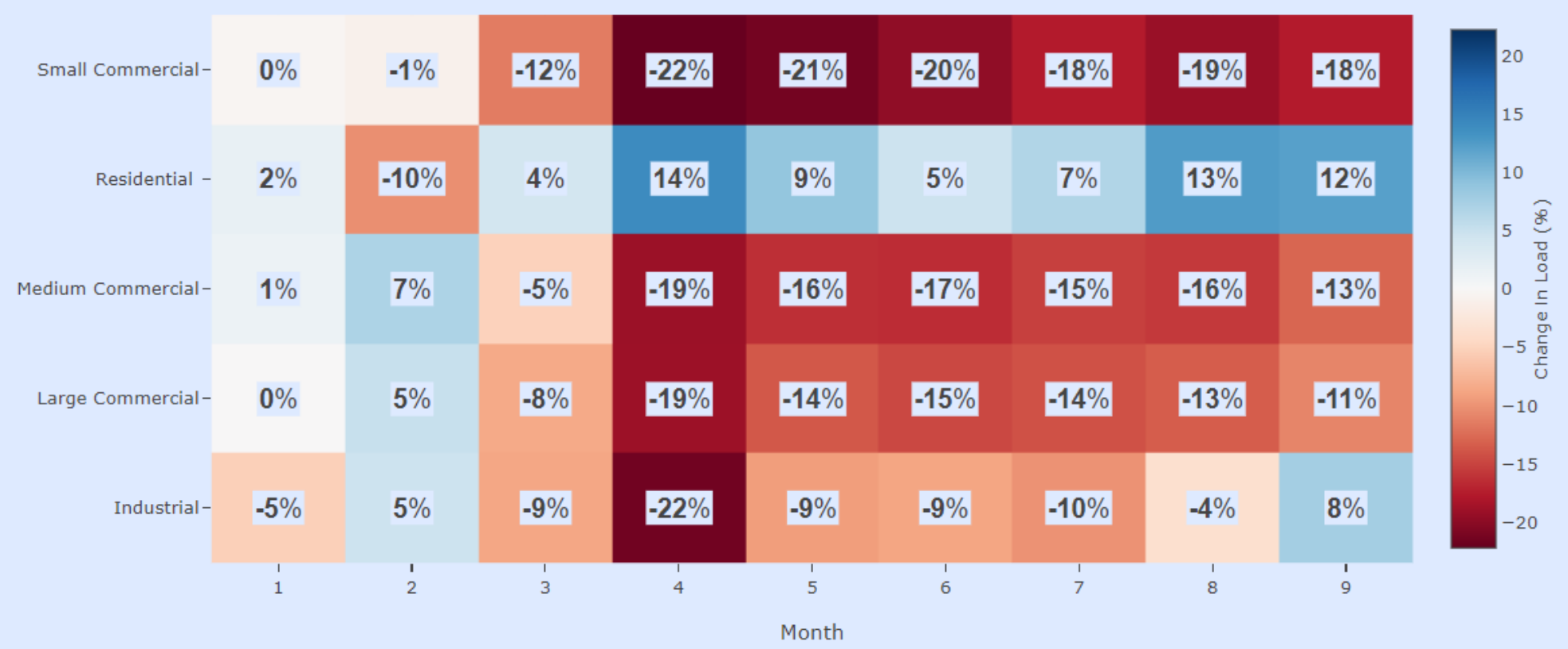
Monthly Load Changes by Customer Class

- Significant decrease in C&I load, increases in residential load in each month compared to same month in 2019.



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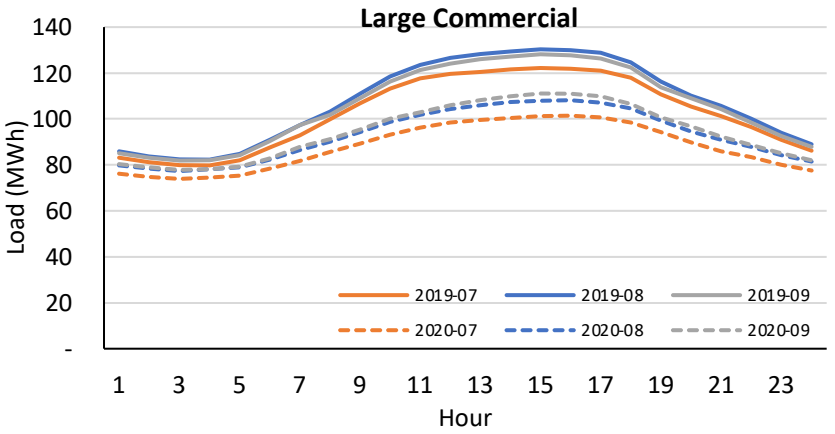
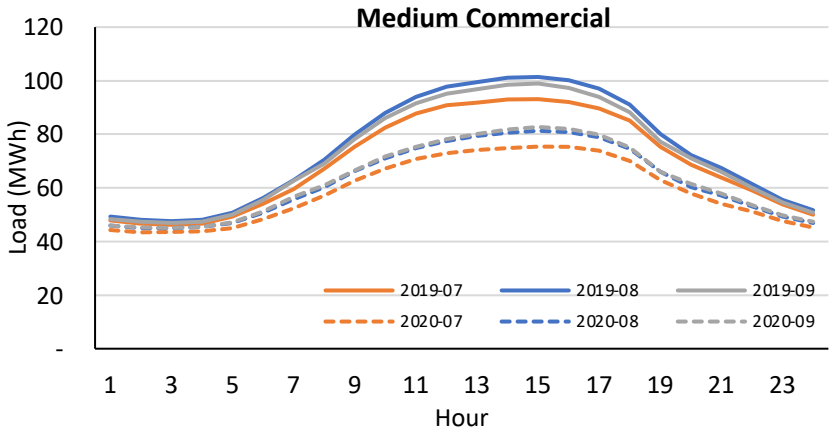
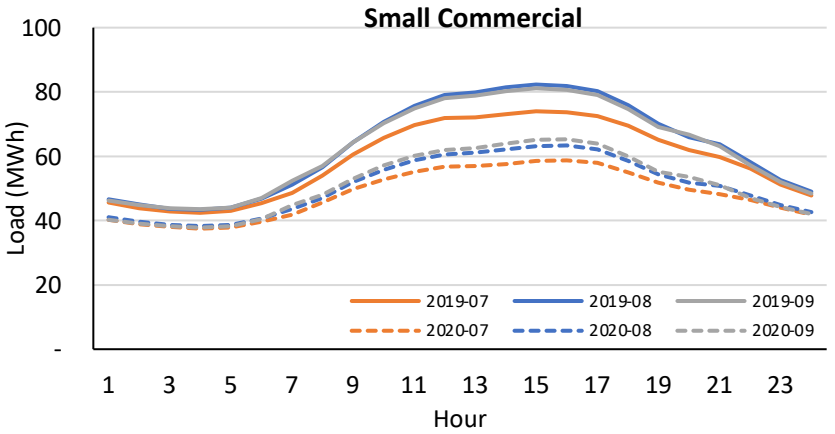
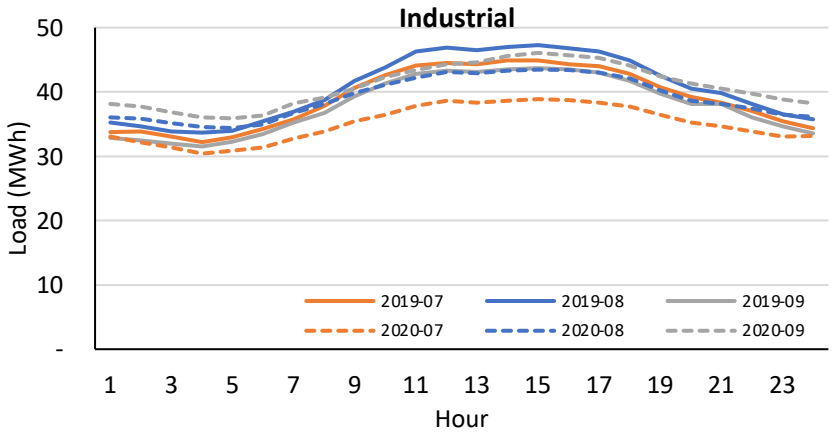
Load Shapes (C&I)

- 2020 shapes (dashed lines) are scaled down compared to 2019.









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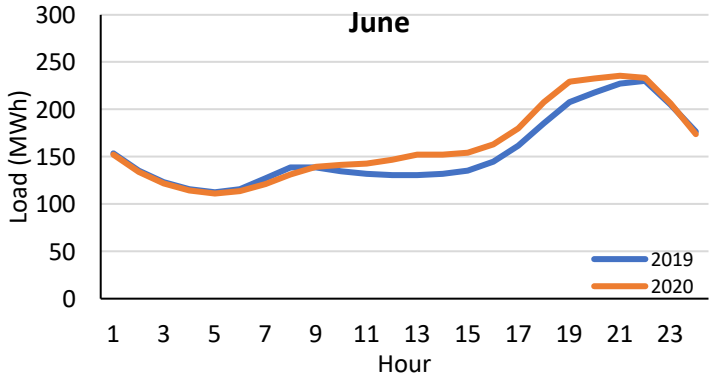
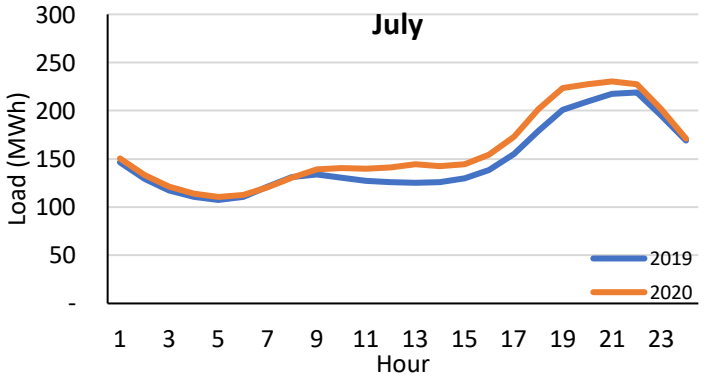
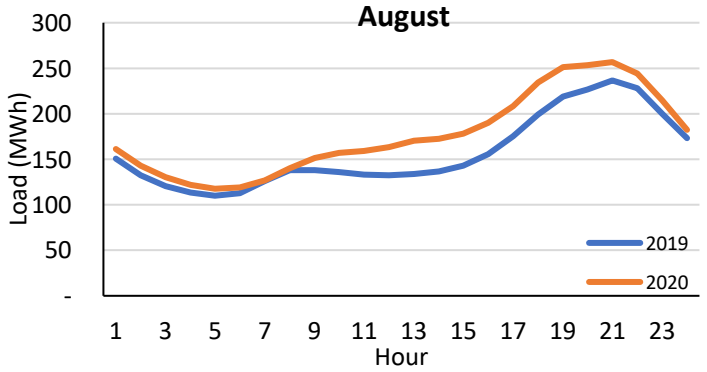
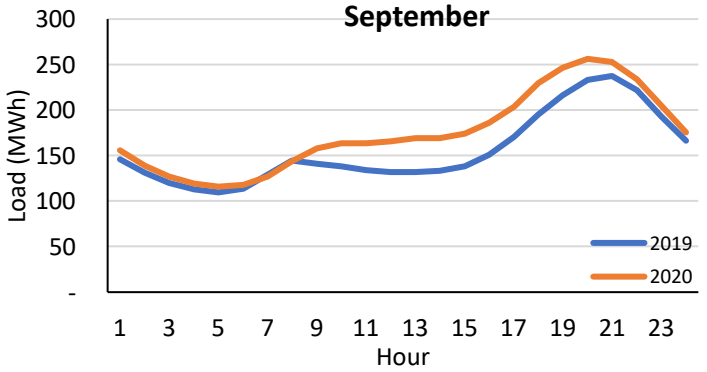
Load Shapes (Residential)

- 2020 residential load shapes (orange lines) have changed compared to 2019 shapes (blue lines):
  - No drop-off during mid-day
  - Bigger increase in August/September due to heatwave and smokes









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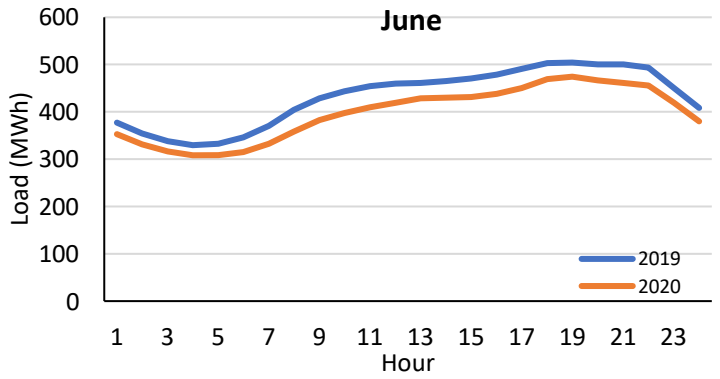
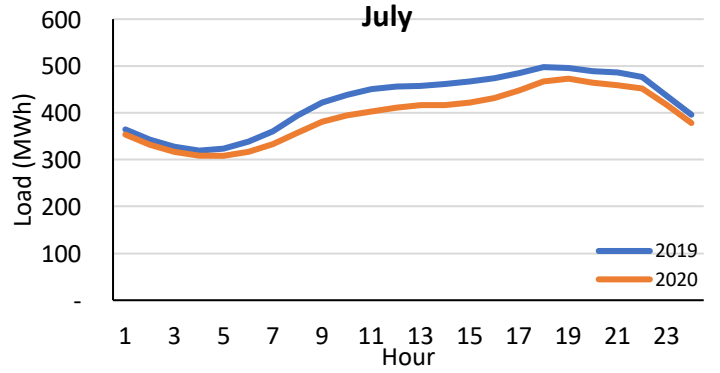
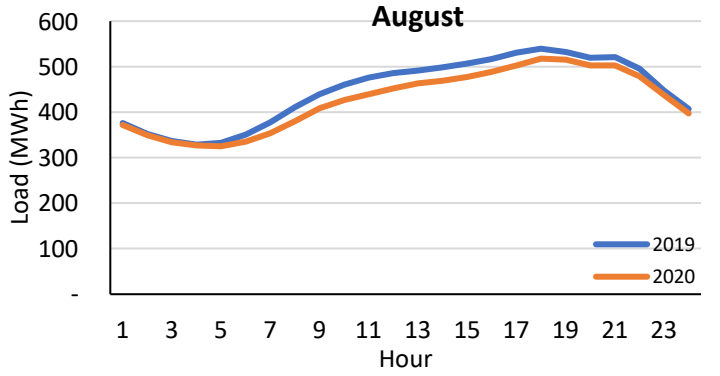
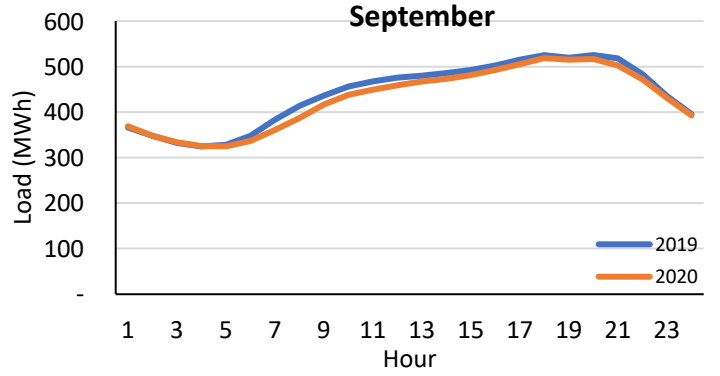
PCE Load Shapes

- 2020 PCE load shapes (orange lines) have scaled down compared to 2019 shapes (blue lines)
- Smaller difference in August/September due to heatwaves and smokes



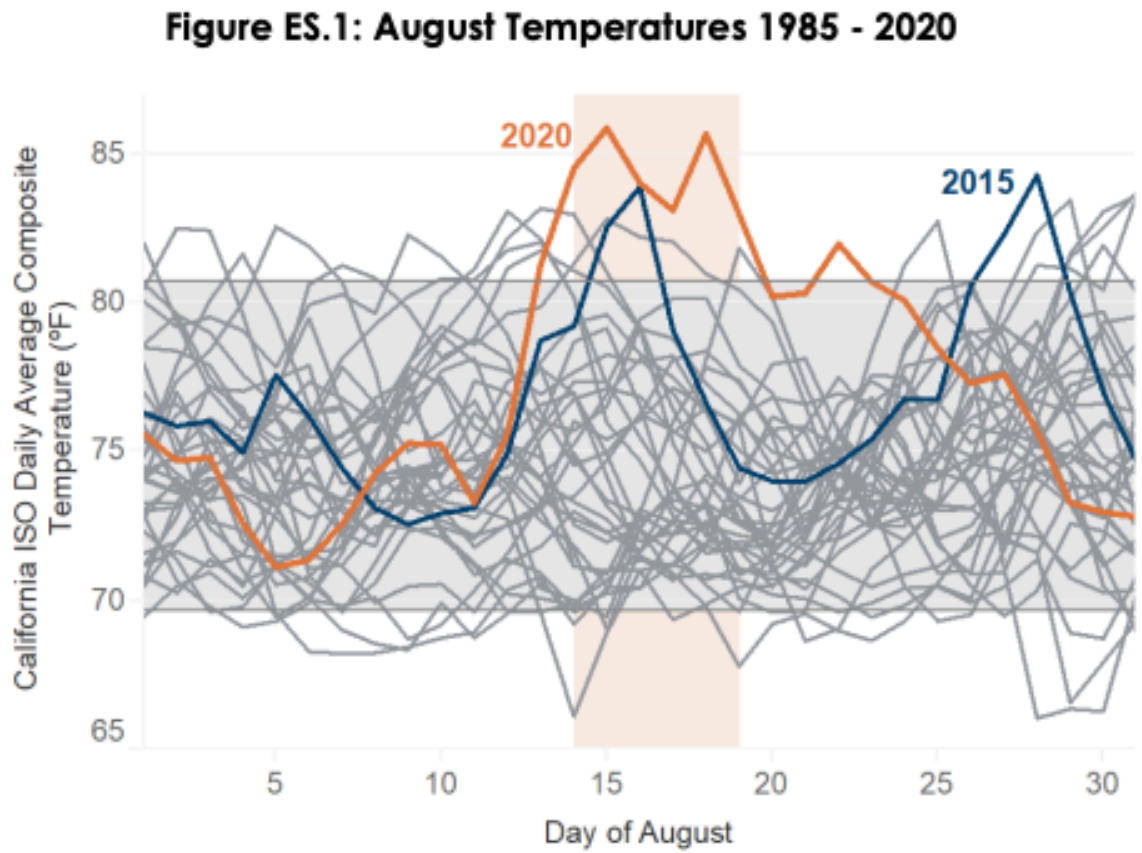






PENINSULA CLEAN ENERGY

Root Cause Analysis of August 14-15: Extreme Heat Storm



(Source: CEC Weather Data/CEC Analysis)

Climate change induced extreme heat storm across western US from August 14-19. CA had 4 of the 5 hottest August days since 1985, with August 15 the hottest.

August 2020 distinguished by **magnitude** (1.5 degrees hotter than 2015) and **duration** (6 hot days in succession)

1-in-35-year weather event compared to 1-in-2 weather planning

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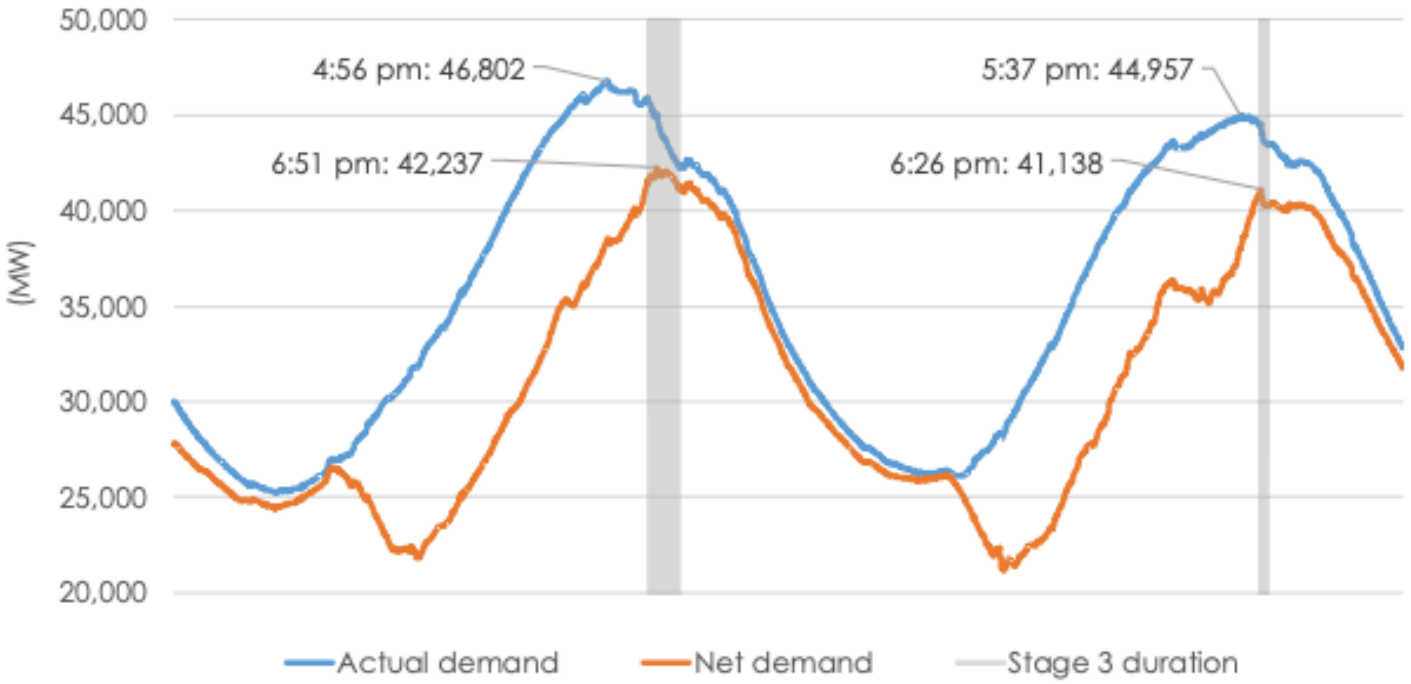
Root Cause Analysis of August 14-15: Demand Peak and Net Demand Peak

Figure ES.2: Demand and Net Demand for August 14 and 15



On August 14 the Stage 3 Emergency was declared at 6:38 pm, right before the net demand peak at 6:51 pm. Similarly, on August 15 the Stage 3 Emergency was called at 6:28 pm, just after the net demand peak at 6:26 pm.

All LSEs met their RA obligations with Planning Reserve Margin (PRM) meeting the 15% requirement (related to the peak hour). PRM not the issue – rotating outages occurred close to the net demand peak.

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Root Cause Analysis - Issues

- Forced outages of 1400-2000 MW of natural gas fleet.
- Imports reduced due to transmission line outage in PNW.
- Wind and solar energy production was less at the net demand peak than was bid into the market.
- Demand response impact still under study.
- Some SCs under-scheduled demand in day-ahead market.

Root Cause Analysis – Prelim Recs

Preliminary recommendations:

- Update planning targets to account for extreme weather due to climate change
- Ensure generation and storage projects currently under construction are completed on time.
- Expedite resources that can be online by 2021 (DR and flexible resources).
- Coordinate additional procurement by non-CPUC jurisdictional entities
- Enhance CAISO practices to accurately reflect supply and demand during stressed conditions.

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Power On Peninsula Medical: Update

- Offering **clean** backup power through **solar+battery storage** or **portable backup batteries**
- **Priority customers**: High Fire Threat Districts, affected by previous PSPS events, low income/disadvantaged communities, CARE/FERA, Medical Baseline
- Close collaboration with partners allowed us to provide batteries to all customers with medical devices impacted by last week's PSPS event who requested one

Update as of today:

- GoalZero has delivered 150 batteries and 100 foldable solar panels to Hassett
- PCE has qualified 90 customers to receive 94 batteries and 20 foldable solar panels

PLUS $5000 donated to Puente de la Costa Sur for hotel vouchers for those displaced by wildfire evacuations.

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San Mateo County Status – Reach Codes

	Member Agency	Reach Code Status	Building (proposed)	EV
	Brisbane	Adopted	All-electric w/ exceptions	MUD 1xL2/ unit
	Burlingame	Adopted	All-electric w/ exceptions	PCE model code (variant)
New	East Palo Alto	Adopted	(All-electric w/ exceptions)	PCE model code (variant)
	Menlo Park	Adopted	All-electric w/ exceptions	(existing EV code)
	Pacifica	Adopted	All-electric w/ exceptions	(existing EV code)
	County of San Mateo	Adopted	All-electric w/ exceptions	PCE model code
New	Redwood City	Adopted	All-electric w/ exceptions	PCE model code
Updated	San Mateo	Adopted	All-electric w/ exceptions (updated)	Increase EV capable
	San Carlos	Adopted	Pre-wiring on single-family homes (considering all-electric)	
	Portola Valley	1st reading TBD	(All-electric w/ exceptions)	(existing EV code)
	Belmont, Colma, Daly City, Hillsborough	Letter of Intent, Council briefing done		
	Millbrae, San Bruno, South SF	Council briefing scheduled		
	Foster City, Half Moon Bay	Council briefing done		
	Atherton, Woodside	Declined		

Santa Clara County
Adopted: 12
In-Progress: 3

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Upcoming Meetings

These meetings will continue to be held by video/teleconference

- Citizens Advisory Committee:
  - November 5 at 6:30 p.m.

- Executive Committee:
  - November 9 at 8:00 a.m.

- Audit & Finance Committee:
  - November 9 at 10:00 a.m.

- Board of Directors:
  - November 19 at 6:30 p.m.

PENINSULA CLEAN ENERGY

Regular Agenda

3. Citizens Advisory Committee Report (Discussion)

Regular Agenda

4. Audit and Finance Committee Report (Discussion)

Regular Agenda

5. Approve revised CEO Agreement (Action)

   - Presented by Jeff Aalfs, Chair

Regular Agenda

6. Approve the Audited Financial Statements for Fiscal Year 2019-2020 (Action)

PENINSULA CLEAN ENERGY

Audited Financial Statements Board Meeting

October 22, 2020

PENINSULA CLEAN ENERGY

Income Statement vs. Budget – Final

	Month of June, 2020					
	Current Month			Year-to-date		
	Actual	Budget	Var Fav/(Unf)	Actual	Budget	Var Fav/(Unf)
OPERATING REVENUES						
Electricity Sales, net	22,872,364	24,917,451	(2,045,087)	275,534,023	265,221,745	10,312,277
Green electricity premium	200,435	213,069	(12,633)	2,558,513	2,560,486	(1,973)
Total Operating Revenues	**23,072,799**	**25,130,519**	**(2,057,720)**	**278,092,536**	**267,782,231**	**10,310,305**
OPERATING EXPENSES						
Cost of energy	24,171,481	16,978,689	(7,192,793)	216,065,642	216,549,065	483,423
Staff compensation	441,816	420,302	(21,514)	4,522,467	4,589,149	66,682
Data Manager	280,873	318,510	37,637	3,580,229	3,822,123	241,895
Service Fees - PG&E	108,034	104,671	(3,363)	1,255,183	1,256,056	873
Consultants & Professional Services	103,372	68,250	(35,122)	725,349	896,333	170,984
Legal	183,679	122,625	(61,054)	1,309,477	1,471,500	162,023
Communications and Noticing	121,832	146,233	24,401	1,116,387	1,754,800	638,413
General and Administrative	116,968	102,224	(14,745)	1,317,745	1,277,187	(40,558)
Community Energy Programs	85,683	591,999	506,316	1,351,626	5,094,473	3,742,847
Depreciation	5,940	8,200	2,260	93,124	98,400	5,276
Total Operating Expenses	**25,619,678**	**18,861,703**	**(6,757,975)**	**231,337,227**	**236,809,086**	**5,471,859**
Operating Income (Loss)	**(2,546,879)**	**6,268,816**	**(8,815,695)**	**46,755,309**	**30,973,145**	**15,782,164**
NON-OPERATING REVENUES (EXP.)						
Total Nonoperating Income/(Expense)	113,579	158,000	(44,421)	2,177,295	2,232,000	(54,705)
CHANGE IN NET POSITION	**(2,433,300)**	**6,426,816**	**(8,860,116)**	**48,932,604**	**33,205,145**	**15,727,459**
CHANGE IN NET POSITION						
Net Position at the beginning of period	191,505,031	161,564,770	29,940,261	140,139,128	134,786,442	5,352,686
Change in Net Position	**(2,433,300)**	**6,426,816**	**(8,860,116)**	**48,932,604**	**33,205,145**	**15,727,459**
Net Position at the end of period	189,071,732	167,991,587	21,080,145	189,071,732	167,991,587	21,080,145
Ending Cash & Cash Equivalents	**210,562,154**	**159,102,751**	**51,459,403**			

Changes and Notes since Preliminary:

- **Revenues**
  - unchanged
- **Expenses** are $32K lower
  - Immaterial changes
  - $31K adjustment to Cost of Energy
  - $1K adjustment to G&A
  - $6.6 million Change in Estimate to REC costs was agreed with the auditors to leave in FY19-20 as presented
- **Change in Net Position**
  - $32K higher

Auditor Conclusions

- Auditor Required Communications Findings/Summary
  - Unmodified opinion – The financial statements are materially accurate
  - No significant deficiencies or material weakness is internal control noted
  - The significant accounting policies adopted by PCE throughout the periods audited appear appropriate and consistently applied
  - No significant or unusual transactions or applications of accounting principles where a lack of authoritative guidance exists
  - No disagreements with management concerning the scope of audits, the application of accounting principles, or the basis for management's judgments on any significant matters

Summary

- Audit & Finance Committee – October 13, 2020
  - Reviewed draft financial statements
  - Met with Auditors
  - Approved resolution recommending approval by Board of Directors

- Audit complete and signed off on October 15, 2020

Board Approval

APPROVE THE AUDITED FINANCIAL STATEMENTS FOR FISCAL YEAR 2019-2020

Regular Agenda

7. Adopt Resolution adopting PCE's amended JPA (Joint Powers Authority) Agreement to Allow for the Addition of New Member Agencies as Parties to the JPA and Adding the City of Los Banos as a Member, and Adopt Resolution authorizing the City of Los Banos as a new member of the Peninsula Clean Energy Authority in the Exhibits (Action)

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Status and Next Steps

October 21	Los Banos City Council voted to join PCEA
October 22	PCE Final Actions/Approvals
November 19	Los Banos Board Member Sworn In
December 17	Amended Implementation Plan Adopted by PCE board
Before Dec 31	Amended Implementation Plan Submitted to CPUC

PENINSULA CLEAN ENERGY

Recommenation

Adopt Resolution adopting PCE's amended JPA (Joint Powers Authority) Agreement to Allow for the Addition of New Member Agencies as Parties to the JPA and Adding the City of Los Banos as a Member,

and

Adopt Resolution authorizing the City of Los Banos as a new member of the Peninsula Clean Energy Authority in the Exhibits (Action)

PENINSULA CLEAN ENERGY

Regular Agenda

8. Approve Resolution Delegating Authority to Chief Executive Officer to Execute a Power Purchase Agreement (PPA) for Renewable Supply with Shiloh I Wind Project LLC, an Oregon limited liability company, and any necessary ancillary documents. Power Delivery Term: January 1, 2024 through December 31, 2030. Not to Exceed: $200 million (Action)

PENINSULA CLEAN ENERGY

8. Authorize PPA with Shiloh I Wind Project LLC

10/22/2020

PENINSULA CLEAN ENERGY

Recommendation

Staff recommends that the Board approve the PPA extension with Shiloh

AGENDA

- Background
- Introduce Avangrid Renewables
- Project Details & Location
- Key Differences between current PPA and 2nd PPA
- Generation Profile
- Competition for Wind Resources
- Recommendation

PENINSULA CLEAN ENERGY

Background

On May 25, 2017, the board approved PCE's first PPA with Shiloh

- **5-year term**: Jan. 1, 2019 - Dec. 31, 2023
- **Contracted capacity**: steps up as 2nd off-takers contract expires
  - 25 MW up until May 31, 2021
  - Steps up to 125 MW in July 2021
  - 150 MW in 2022 - 2023

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Seller: Avangrid Renewables

- Headquartered in Portland, Oregon. ~900 employees
- 7.5GW Installed Wind and Solar Capacity in over 20 states and all ISO/RTOs.
- 19GW of Pipeline
- 3rd largest wind operator in the U.S.
- In 2019, Avangrid Renewables produced ~17,500 GWh of renewable energy
- The energy delivered from our facilities has allowed our customers to avoid 12.3 million metric tons of CO2, equivalent to removing 2.6 million cars from the road
- Avangrid is BBB+ (S&P) and Baa1 (Moody's)

Project Details

- **Project Capacity:** 150 MW
- **Project Location:** Solano County, California.
- **Number of Wind Turbines:** 100 GE Energy 1.5 MW turbines
- **Number of Landowners:** 26
- **Approximate Acreage:** 6,800 acres. The land continues to be used for grazing.
- **Ongoing O&M Jobs:** 12
- **Property Taxes:** Over $1 million each year
- **Lease Payments:** Hundreds of thousands of dollars each Year
- **Environmental Benefits:** According to the EPA average emissions in California, the project will help offset over 380 million pounds of carbon dioxide, over 450,000 pounds of nitrogen oxide and over 250,000 pounds of sulfur dioxide.

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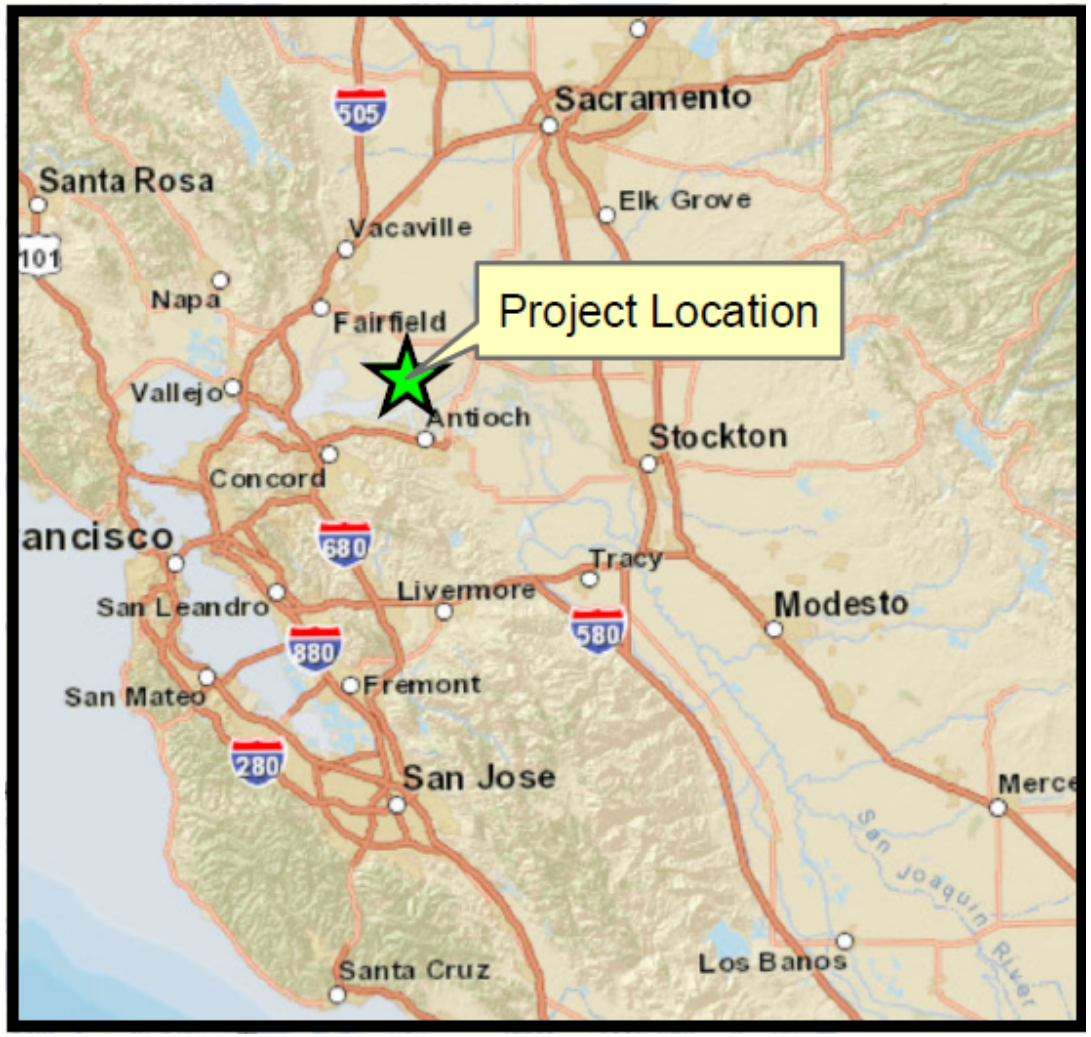
Project Location



Summary of PPA Details

- **Capacity:** 150 MW, PCE will be the sole off-taker
- **Term:** 7 years, 2024 – 2030
- **Products:** Energy, Renewable Energy Credits, and Resource Adequacy
  - Shiloh provides Bay Area Local Resource Adequacy

Key Differences Between the Current PPA and Extended PPA

1. **Price:** The price for the second PPA is slightly higher than the current PPA, but competitive with other options.
2. **Capacity:** PCE will procure the full output of the facility throughout the term.
3. **Term:**
    - Current PPA is 5 years ending Dec 2023
    - Second PPA is 7 years beginning Jan 2024 through end of 2030
4. **Seller Performance Security:** The security was increased proportionally for the longer-term, higher price and increased capacity
5. **Resource Adequacy (RA) Shortfall:** Updated the terms to be consistent with the current RA market in the case the project didn't supply the adequate amount of RA and can't replace the deficient portion, known as an "RA Shortfall."
6. **REC Replacement:** Updated the terms to be more in line with current market in the case where the project is deficient in delivering renewable energy.
7. **Replacement Energy:** Updated the terms to be more in line with current market and gives PCE more control of the energy if the project becomes deficient in delivering the minimum required energy amounts.

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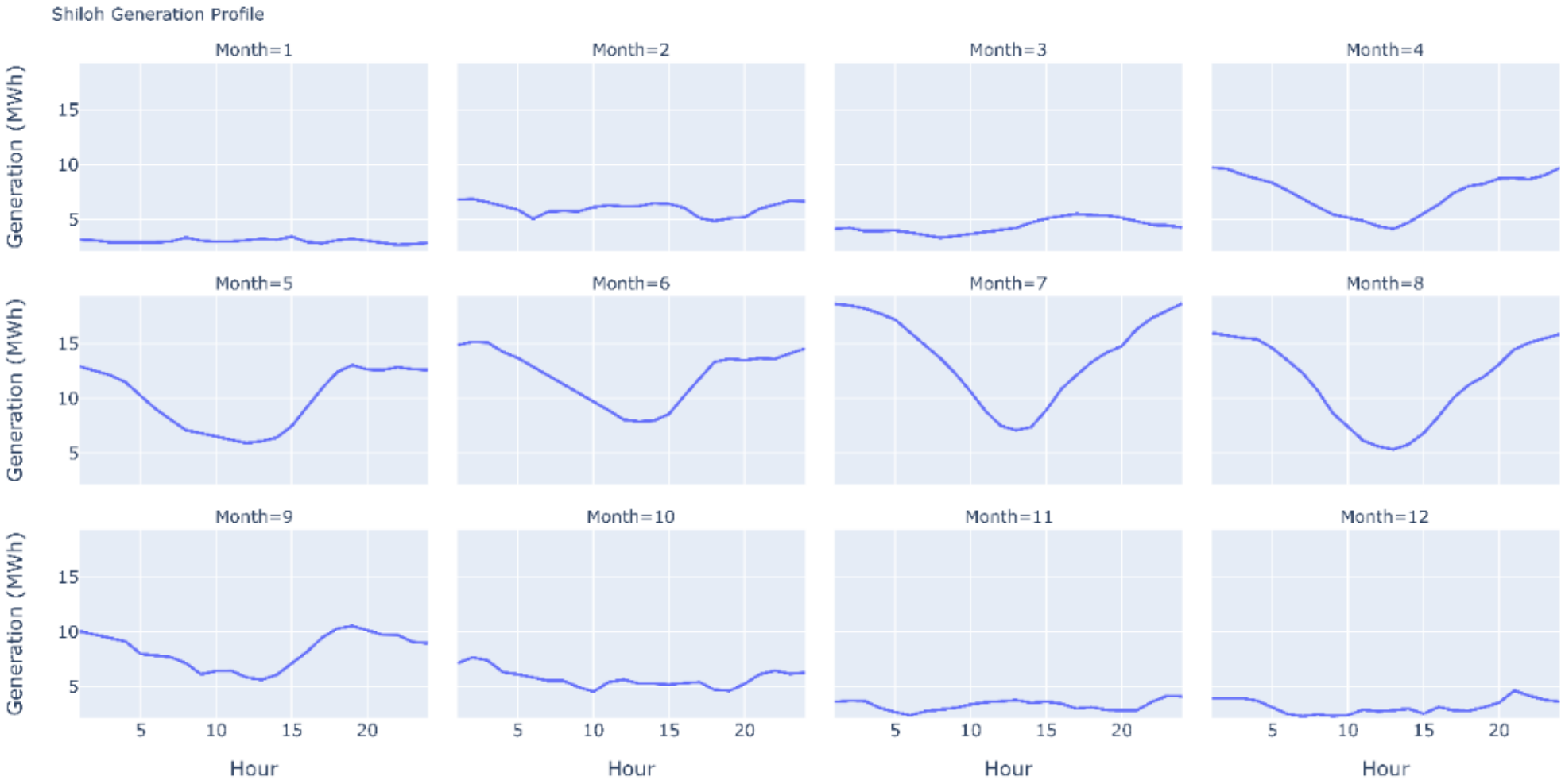
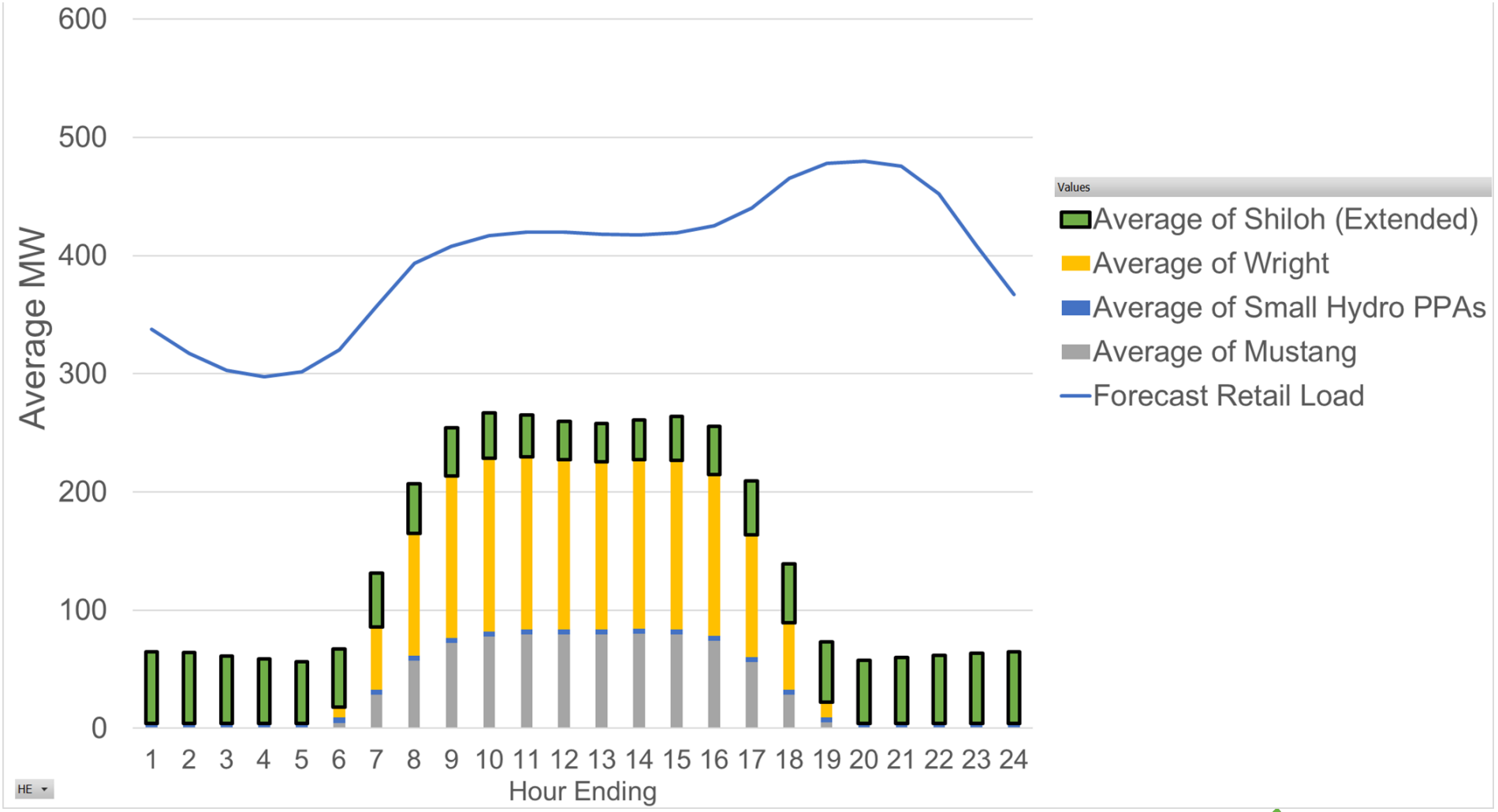
Shiloh's Historical Generation Profile



PCE 2024 Annual Average Load Portfolio



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Competition for Wind Resources

- PCE will need significant wind resources to meet 2025 100% 24x7 renewable goal
- Of the 40 projects bid into 2020 RFO, only 6 were wind projects
- Majority of existing projects are under contract and contracts don’t expire until after 2025
- Most wind areas in CA are already fully developed
- Limited repower opportunities
- Out of state options are risky due to necessary transmission and do not provide RA benefits

Recommendation

DELEGATE AUTHORITY TO THE CHIEF EXECUTIVE OFFICER TO:

(A) EXECUTE A POWER PURCHASE AGREEMENT FOR RENEWABLE SUPPLY WITH SHILOH I WIND PROJECT LLC, AN OREGON LIMITED LIABILITY COMPANY, WITH TERMS CONSISTENT WITH THOSE PRESENTED, IN A FORM APPROVED BY THE GENERAL COUNSEL AND FOR A POWER DELIVERY TERM OF UP TO SEVEN YEARS, IN AN AMOUNT NOT TO EXCEED $200 MILLION; and

(B) EXECUTE SUCH OTHER ANCILLARY DOCUMENTS, IN A FORM APPROVED BY THE GENERAL COUNSEL, AS MAY BE NECESSARY TO EFFECTUATE THE PURCHASE OF SUCH POWER FROM SHILOH I WIND PROJECT LLC.

Backup Slides for Agenda Item 8

PENINSULA CLEAN ENERGY

Key Differences between PPAs

RA Shortfall –

- Current PPA was executed in 2017. Updated language in 2nd PPA to align with PCE's proforma.
- Ensures that if Avangrid can't replace the RA they will compensate PCE at a rate comparable to the CAISO CPM soft-offer cap for RA

REC Replacement –

- If Shiloh didn't meet the performance requirements* and couldn't provide the RECs, then PCE would be compensated at a rate determined by either a published REC pricing index or the average of 3 nationally recognized broker quotes between a minimum and maximum.

* Performance requirement – Must exceed a set percentage of expected energy over two consecutive contract years.

PENINSULA CLEAN ENERGY

Key Differences between PPAs

Replacement Energy

- In the current PPA, there is a mechanism that allows Avangrid to replace energy from another resource w/in 90 days if they don't meet the performance requirements*.
- We removed this concept in the new PPA because PCE plans to match its renewable generation to its load starting in 2025.
- Instead Avangrid will pay monetary damages.

* Performance requirement – Must exceed a set percentage of expected energy over two consecutive contract years.

PENINSULA CLEAN ENERGY

Regular Agenda

9. Authorize Chief Executive Officer to execute a contract with McCalmont Engineering for $137,500 and an additional as-needed budget of $129,500 for a total authorized expenditure not to exceed $267,000 in support of Distributed Energy Resources site evaluation and procurement activities (Action)

DER Site Evaluation and Engineering Services RFP

Siobhan Doherty, Director of Power Resources

Dave Fribush, Distributed Energy Resources Technical Advisor

October 22, 2020

PENINSULA CLEAN ENERGY

Recommendation

(1) Authorize Chief Executive Officer to execute a contract with McCalmont Engineering for Distributed Energy Resources (DER) Site Evaluation and Engineering Services in an amount not to exceed $137,500 for a term through December 31, 2021

(2) Approve an additional budget of up to $129,500 to be used on an as-needed basis to support additional DER site evaluations and procurement activities

(Action)

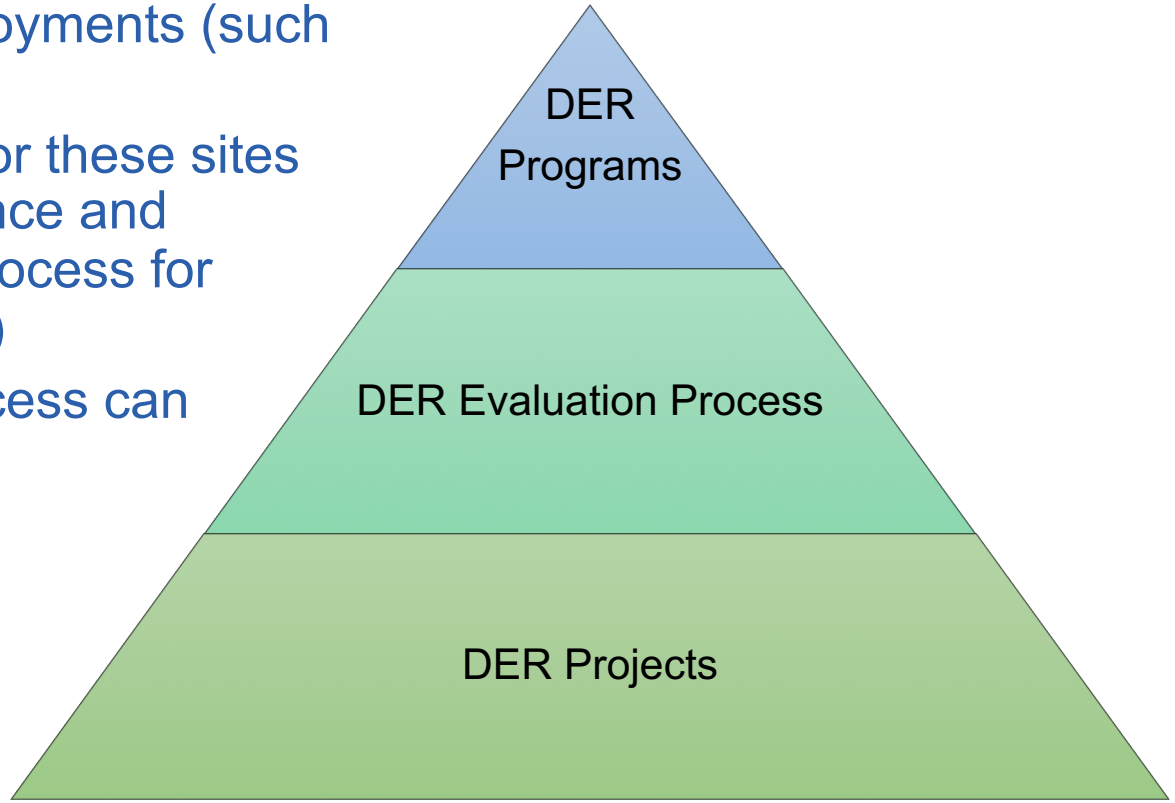
Agenda

- Project Background
- Selection Process/Results
- Budget
- Recommendation

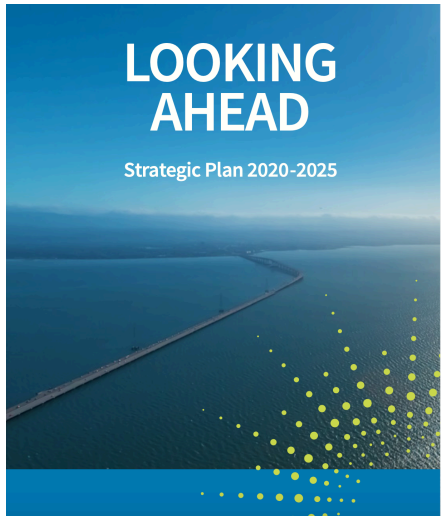
Background

- Power Resources Team has worked with the County of San Mateo to identify 7 sites for potential DER deployments (such as solar + storage)
- We see an opportunity to both develop DERs for these sites (first order project goal) as well as use experience and learnings to inform creation of an Evaluation Process for future DER projects (second order project goal)
- An established and tested DER evaluation process can better enable future DER programs

7 County Sites From Solicitation
Half Moon Bay Airport
Maple Street Correctional Facility
Pescadero Landfill
San Carlos Airport
San Mateo County Events Center
San Mateo Medical Center
San Mateo County Youth Services



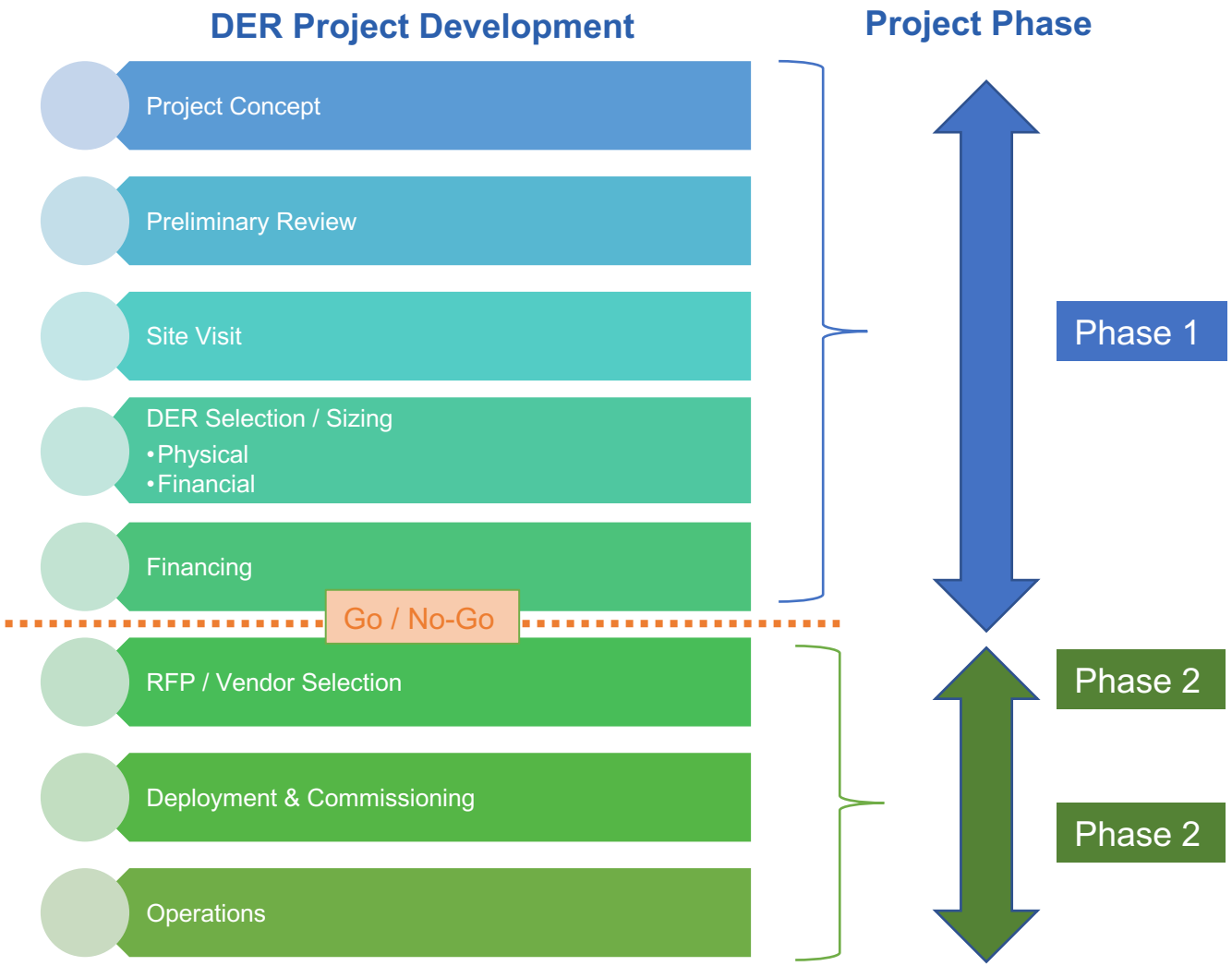
Alignment with Strategic Plan



This project supports the following objectives and key tactics in Peninsula Clean Energy's strategic plan:

- Objective C Local Power Sources: Create a minimum of 20 MW of new power sources in San Mateo County by 2025
  - Work with local government partners to identify and catalog opportunities for distributed energy resources across San Mateo County.
  - Implement Board-approved strategy to increase community resilience.
- Support innovative sources and solutions for clean energy
- Foster innovation through pilot programs

DER Project Stage and Key Skillset



Project Phase

Phase 1

Phase 2

Phase 2

Key Scope

- Directly evaluate sites
- Determine components of Project Packages
- Create Project Packages

- Help prepare RFP materials
- Oversee deployment as independent engineer

McCalmont would not be eligible to respond to RFP to ensure independence in evaluation

RFP Process / Response

Step 1: Qualifying

- 13 responses received
- 9 firms invited to Step 2

Step 2: Detailed Response

- 8 responses received
- 4 invited to Shortlist Interview

Step 3: Shortlist Interview

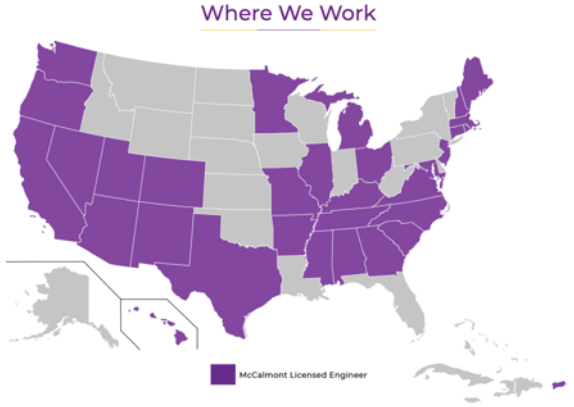
- 4 firms interviewed
- McCalmont Engineering selected by Evaluation Team

Subjective Evaluation Criteria	Objective Evaluation Criteria
Experience and Qualifications	Location
Thoughtfulness and completeness of response	Pricing
Creativity and Adaptability	
Fit	
Information Presentation	
References	

Observations:

- Thoughtfulness, thoroughness of all responses was exceptional
- Experience and qualifications of responding firms was exceptional
- Interest in participating in project and supporting project goals was strong and genuine

About McCalmont Engineering



- Founded: 2009
- Location: Campbell, CA
- Website: http://www.mccalmont.net/
- Designed or provided guidance for over 750 solar and energy storage projects in 35 U.S. states
- Total project capacity delivered over 2 gigawatts
- Within California, designed hundreds of large commercial and industrial projects, including over 50 solar+storage projects for one of California's largest healthcare providers
- 4 licensed PEs on staff, adding 2 more
- Long-term structural engineering partner is Peoples Associates Structural Engineers (PASE) based in San Jose and Pleasanton, CA

Budget Authorization Request

7 County Sites

Project Phase	Scope	Total Budget Request
1	Site Evaluation and Creation of Project Packages 7 San Mateo County Facilities	$ 137,450

Additional Budget Authorization

Project Phase	Scope	Total Budget Request
1	Site Evaluation and Creation of Project Packages 7 Additional Sites (estimated)	$ 80,591
2 to 4	Independent Engineering Consulting Support	$ 49,000
	Total	$ 129,591

Total Budget Authorization Request: $267,000

Recommendation

(1) Authorize Chief Executive Officer to execute a contract with McCalmont Engineering for Distributed Energy Resources (DER) Site Evaluation and Engineering Services in an amount not to exceed $137,500 for a term through December 31, 2021

(2) Approve an additional budget of up to $129,500 to be used on an as-needed basis to support additional DER site evaluations and procurement activities

(Action)

Regular Agenda

10. Approve Updated EV (Electric Vehicle) Incentives Budget (Action)

Updated EV Incentives & FY22-24 Vehicle Budget

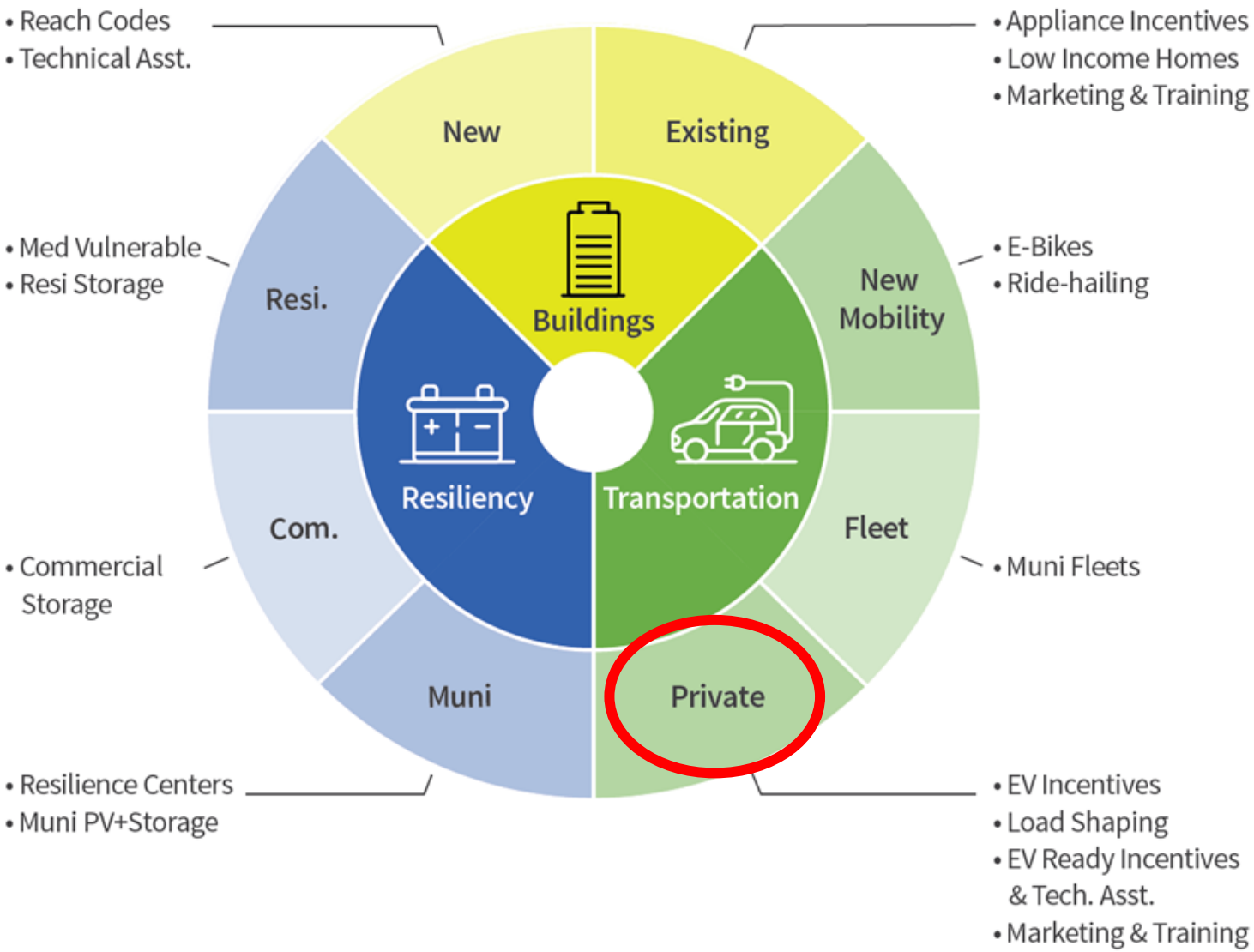
October 22, 2020

PENINSULA CLEAN ENERGY

Agenda

1. Program Portfolio
2. Overall Context
3. Request
4. New EV Incentive update
5. Used EV Incentive update
6. Budget request (FY22-24)

Programs Portfolio



Accelerating EV Adoption

California Governor Signs Order Banning Sales Of New Gasoline Cars By 2035

2045: On-Road Vehicles

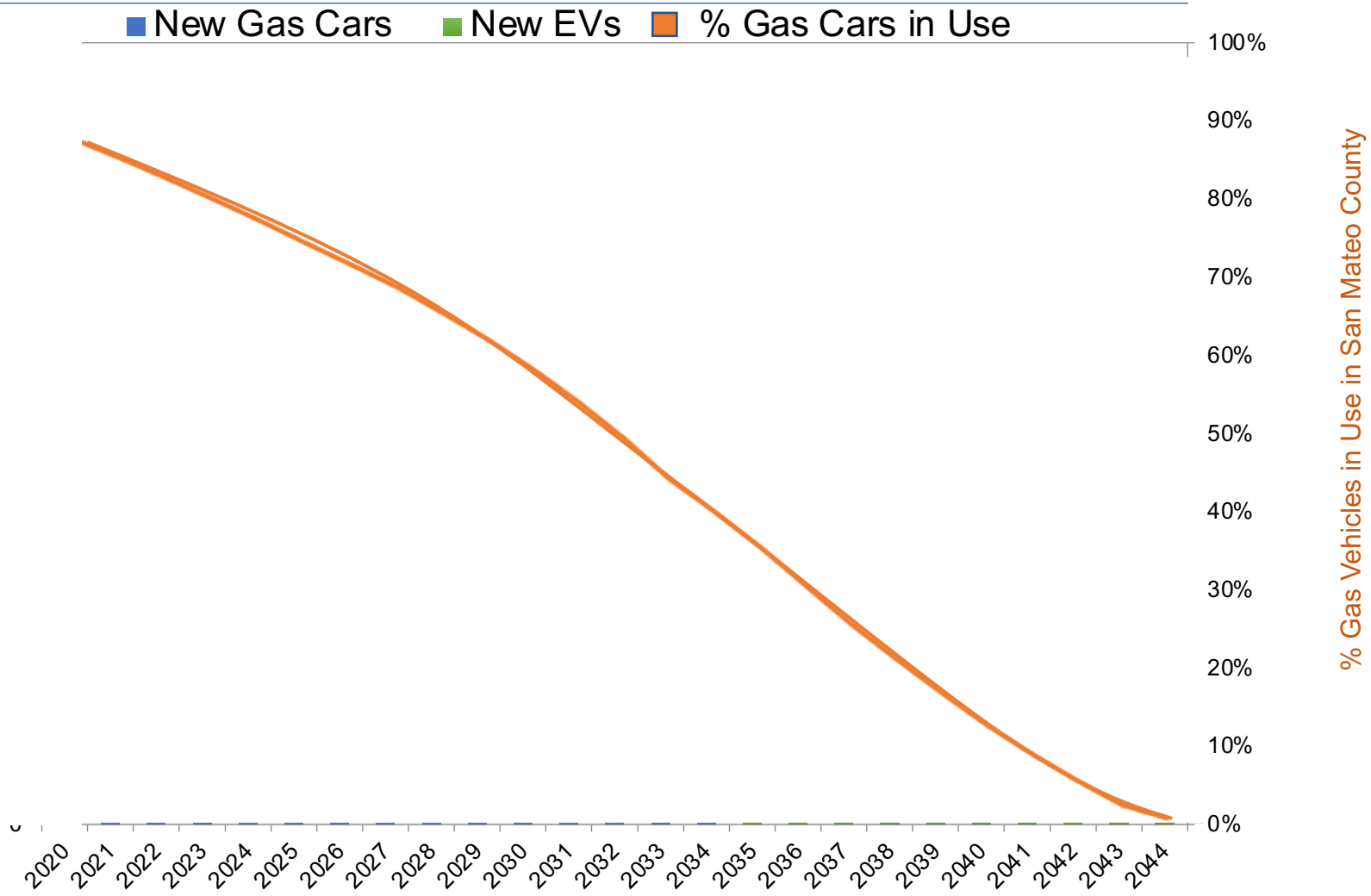
- ~660,000 vehicles in SMC
- 8% overall sales in 2019 were EV (~6,000 EVs)

Conversion Assumptions

- Yearly increase required;
  - 2020: 20% (~9,200 EVs)
  - 2025: 33% (~15,800 EVs)
  - 2030: 57% (~27,800 EVs)

Trajectory

- Proposed 3-year program
  - 2,100 new EVs
  - 2,100 used EVs



EV Incentive Program: Request

Program: Revised electric vehicle incentives for new and used EVs

Request: Approval of updated program design and extended budget

Amount & Term:

Up to $4.7 M over 3-years

- Net new funds: $3.82M
- Includes reallocations of unused funds
  - New EV: $480k
  - Low Income Used EV: $200k
  - Ride & drive: $200k

Summary of Proposed Revisions

Element	Proposed Update
New EV Incentive	• Improved access • Price cutoff • First-time EV-buyer focus
Used EV Incentive	• Continued low-income • Added general access • Expanded outreach and education
Budget	• 3-Year Program FY22-FY24

New EV Incentive: Context

Context

- Foster scale lowering vehicle costs
- Grow EV count to lower GHGs
- Declining State and Federal incentives
- Vehicle sales are climbing

Program To-Date

- 2018 and 2019 program based on Sonoma Clean Power model
- Partnerships with specific dealerships in SMC
- Modest results with 120 and 167 vehicles sold respectively
- Limited uptake due to majority of vehicles sold online
- 84% reported incentive was Very Important or Crucial to purchase

New EV Incentive: Updated

Objectives

- Draw more likely adopters to choose EVs late in the sales cycle
- Increase overall awareness of EVs through county-wide marketing
- Revised to increase uptake and support “additionality”

Overview

- $1,000 for full EV, $700 for plug-in hybrid
- 4th quarter promotion period
- SMC residents only but may purchase from any dealership
- Vehicle price cap of $45,000, before taxes & fees
- Targeted to “first time” EV owners, purchase only

Used EV Incentive: Context

Context

- Used vehicle market 1.5 - 3x the size of new vehicle market
- Demand for used cars has increased in downturn
- No general incentives available for used EVs
- Peninsula Family Svc (admin support) contract expiring Feb 2021

Program To-Date

- Only available to low-income residents
- Partnership with Peninsula Family Service
- Year-round program
- 68 vehicles in 18 months
- Up to $4,000 ($2,000 if “stacking” with other programs)

Used EV Incentive: Updated

Objectives

- Expand access to EVs across the income spectrum
- Provide program responsive to current economic conditions

Overview

- $1,000 for full EV, $700 for plug-in hybrid
- Low-income “adder” of $3,000 or $1,000 if “stacking”
- Year-round availability
- SMC residents only but may purchase from any dealership
- Administrator provides low-income outreach and assistance (select by RFP)

Peninsula Family Svc partnership shift

Within scope

- Continues referral of their program participants to PCE program
- Continues to offer point-of-sale PCE incentive to participants in their loan program

Removed from scope

- Activities which were challenging for PFS
  - Manage interest forms and applications for overall program
  - Education of EVs and other programs
  - Income verification on non-PFS loan recipients

Approx. FY 22-24 budget breakdown

Program	Budget 3-yr total	Vehicle Volumes (est. 3-yr)
New EV	$2,060,000	2,100
Used EV – general	$1,400,000	1,800
Used EV – low inc	$850,000	300
Administrator	$180,000	
Marketing	$210,000	
TOTAL	$4,700,000	4,200

EV Incentive Program: Request

Program: Electric vehicle incentives for new and used EVs

Request: Approval of updated program design and extended budget

Amount & Term:

Up to $4.7 M over 3-years

- Net new funds: $3.82M
- Includes reallocations of unused funds
  - New EV: $480k
  - Low Income Used EV: $200k
  - Ride & drive: $200k

Backup slides

Potential LCFS Revenue Benefit

California Air Resources Board, Low Carbon Fuel Standard (LCFS), is a market-based program of credits that provide value to low carbon fuels used in transportation, including electricity for EVs.

LCFS Credits value to PCE:

- Potential 10-year credit value: $350-$450 per vehicle

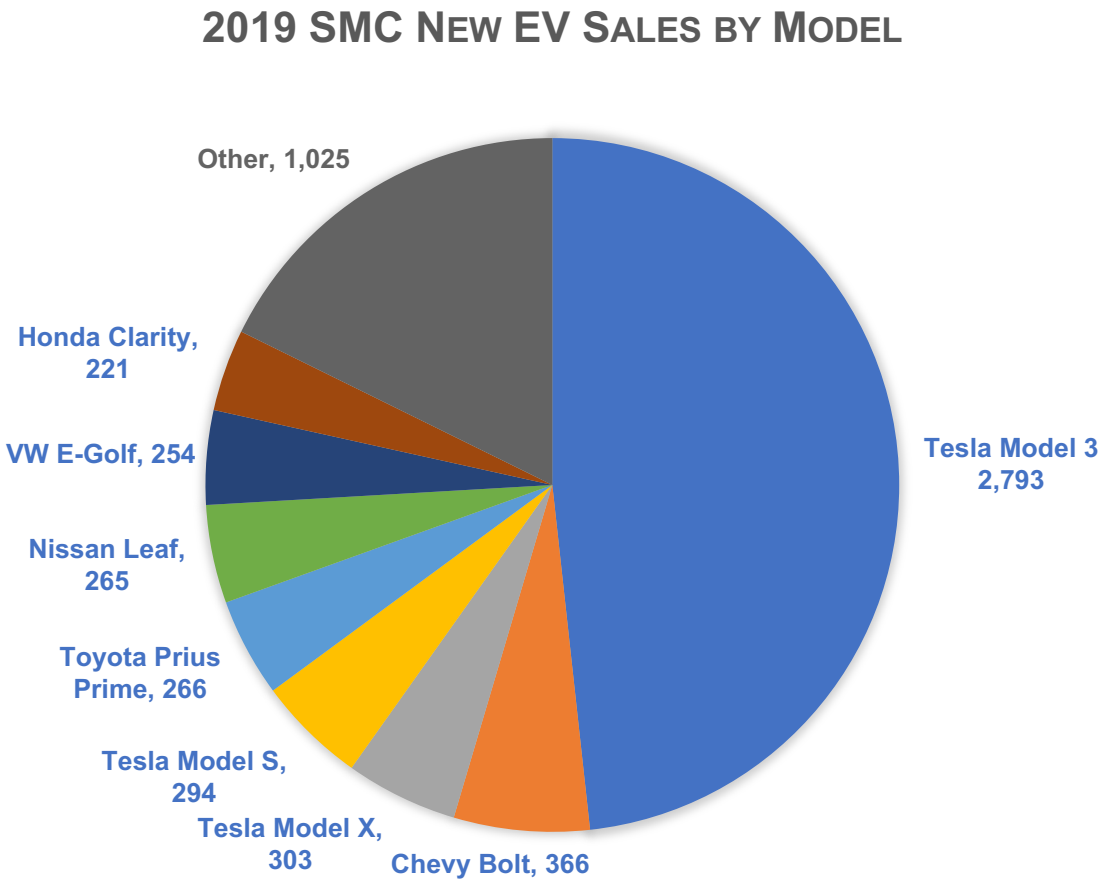
Used EV Incentive: Side by Side

	Current
Overview & additions	• Low income only (DriveForward Electric) • Year round • Any dealership ok • Partnered with Peninsula Family Svc to administer
Incentives	• PHEV & BEV: $2,000 if stacking (AQMD, CVAP) OR $4,000 if not
Uptake	• To date (1 1/4 yrs): 58
Budget	• To date: $169k • Admin: $50k

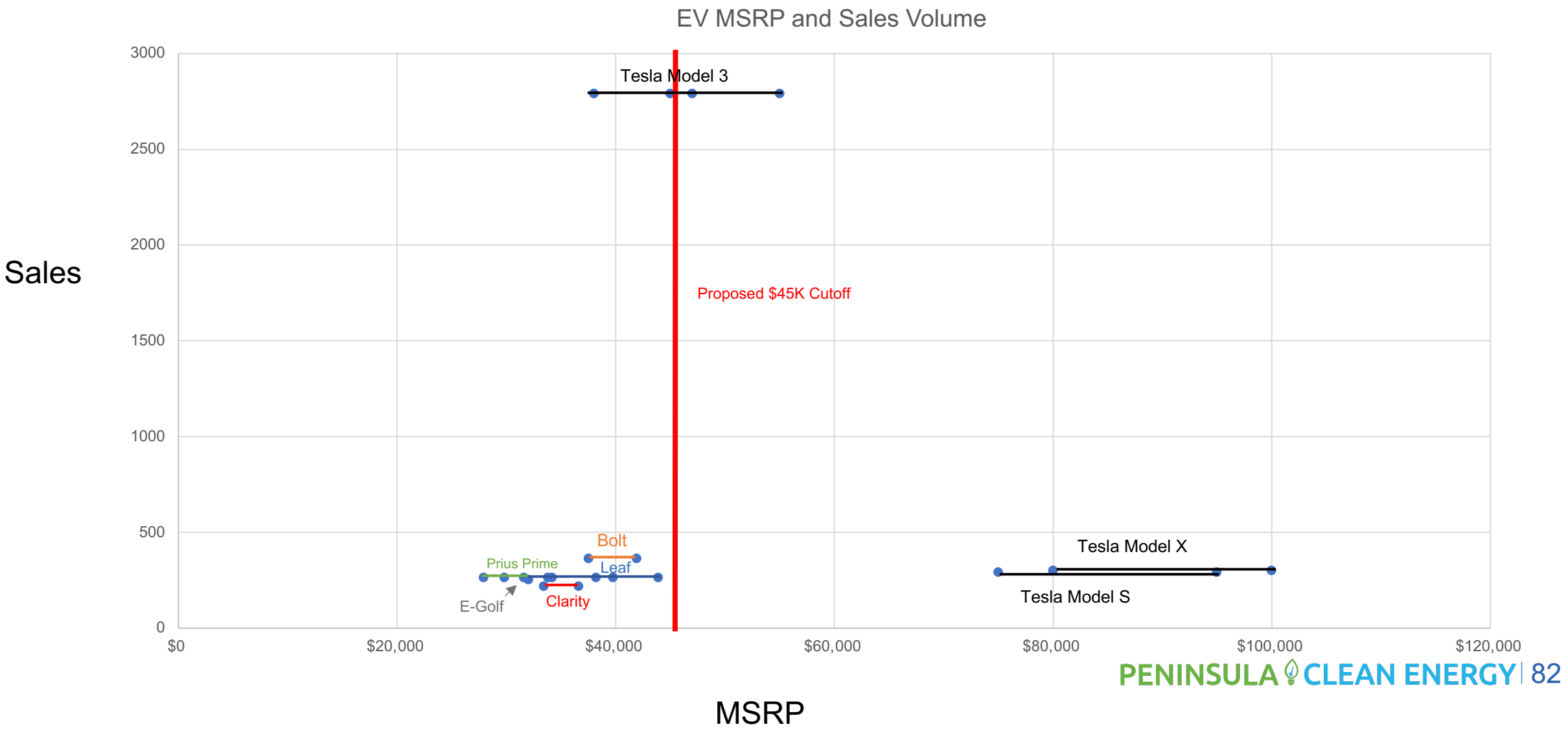
*Exception: Peninsula Family Service (PFS) loan recipients point of sale

Market Conditions: Sales Mix

- ~5,800 total new EV sales in 2019 by San Mateo County residents
- ~16% of EVs purchased at dealers within SMC
- Median household income: $225,000
- Vehicle cost cap can limit incentive “free ridership”



Sales Volumes and MSRP



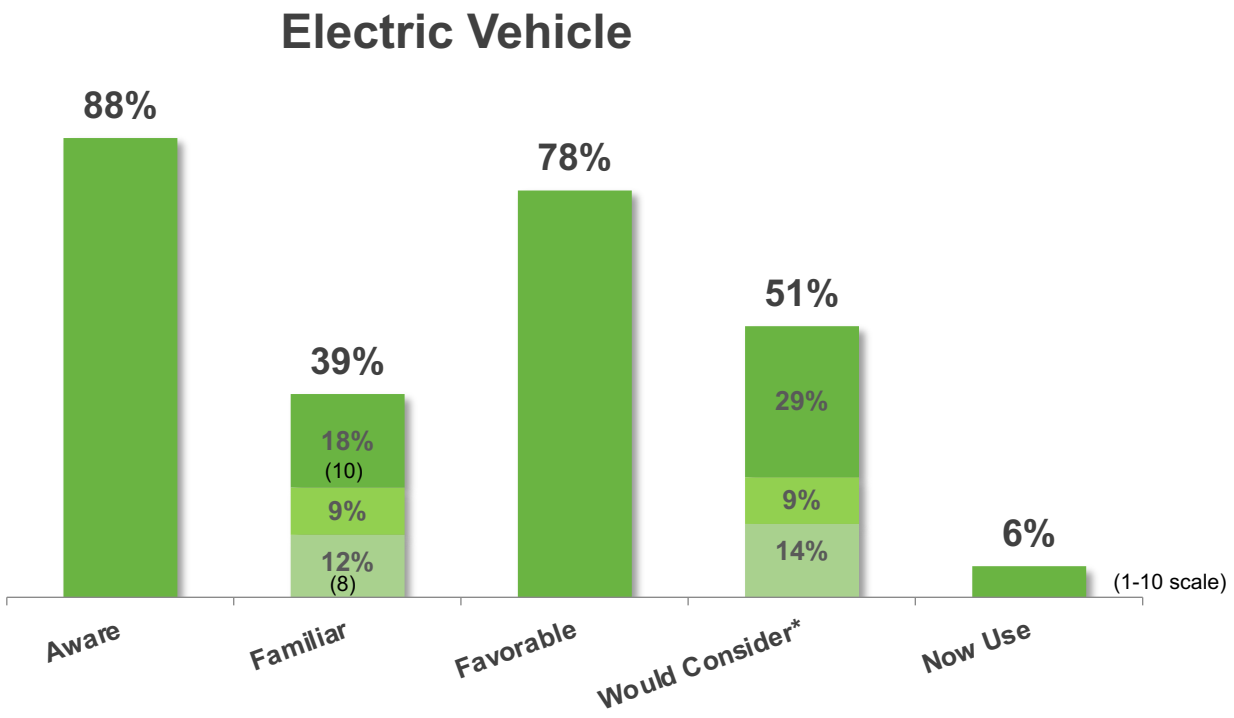
New EV Program Options

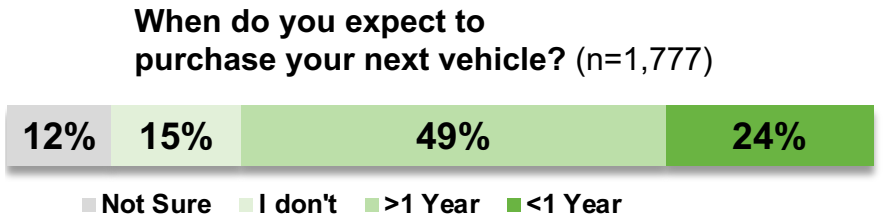
Scenario	Timeframe	Eligible Purchases	Incentive Level	Estimated Max. Rebate Amount **
1*	Q4	• All new EVs <$45K • In county and out of county sales	Plug-in Hybrid: $700 Battery Elec.: $1,000	~920 vehicles
2	Q4	• All new EVs <$45K • In county and out of county sales • Tesla excluded		~450 vehicles
3 (existing program)	Q4	• All new EVs <$45K • In-county purchase only		~190 vehicles
4	Annual	• All new EVs <$45K • In-county purchase only		~750 vehicles

*PCE Staff Recommendation
** Based on 2019 New vehicles sales by San Mateo County residents

2020 Market Survey: Awareness

- Awareness & favorability are high
- Adoption is still low





Regular Agenda

11. Update Board on Status of Strategic IRP (Integrated Resource Plan) Targets (Discussion)

Strategic IRP Update

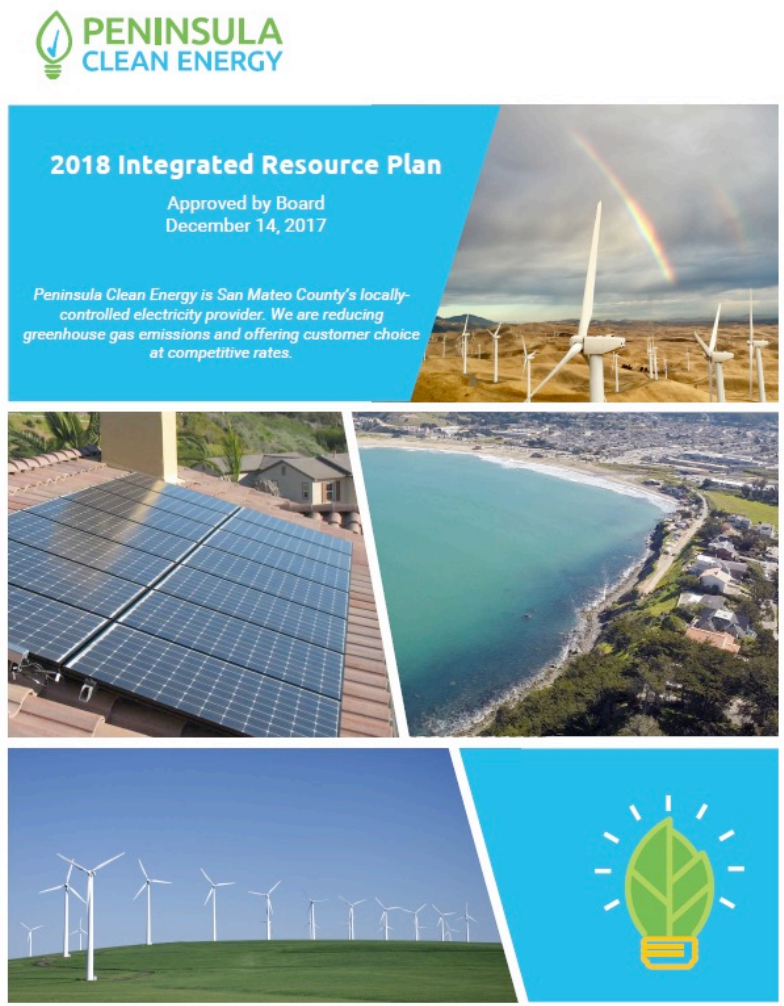
Siobhan Doherty, Director of Power Resources

October 22, 2020

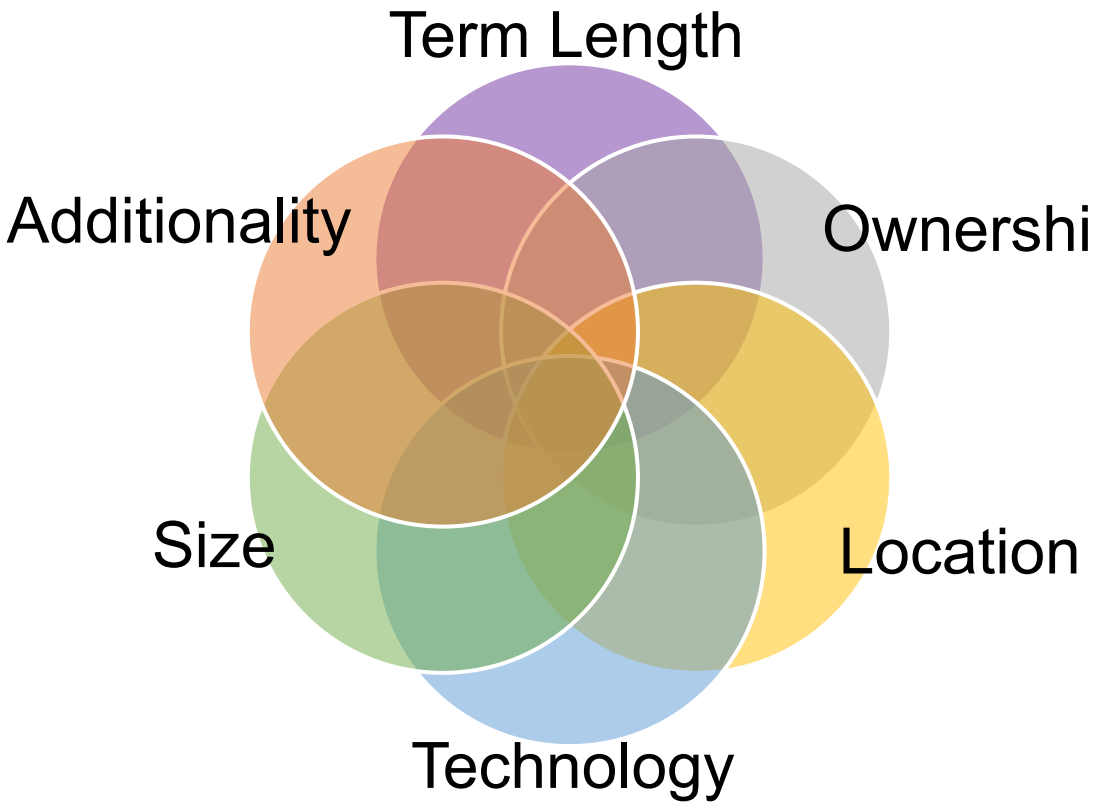
PENINSULA CLEAN ENERGY

BACKGROUND

- December 2017, Board approved 2018 Integrated Resources Plan (IRP)
  - Developed for internal strategic planning, not related to the CPUC IRP process
- 4 primary purposes:
  - Document current procurement status following our first year of operations
  - Quantify resource needs over a ten-year planning period
  - Articulate relevant energy procurement policies
  - Communicate PCE's resource planning policies, objectives and planning framework to the public and key stakeholder groups



DESIGNING A DIVERSE PORTFOLIO



OPEN POSITION

- Monitor open position separately for energy, RPS, GHG-free resources
- Target % in table below to maintain regular procurement cycle

	% of Load Procured	
	Min	**Max**
Current Year	90%	100%
Year 2	75%	90%
Year 3	65%	80%
Year 4 and Beyond	55%	70%

PROCUREMENT STATUS

	2020	2021	2023	2024
Target	Current Year 90% - 100%	Year 2 75% - 90%	Year 3 65% - 80%	Year 4+ 55% - 70%
Energy Hedge	110%	99%	81%	59%
Renewables	106%	71%	64%	46%
GHG-Free	98%	96%	76%	47%

- Over-procurement primarily due to lower load forecasts related to COVID
- In 2020, renewable over-procurement will help offset some of the GHG-Free open position
- Renewable contract in negotiation will bring renewables inline with target ranges

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ADDITIONALITY

- Means that a project or activity would not have happened without the buyer
- New: Means projects that PCE causes to be built or repowered
  - For example, Wright and Mustang 2 would both be considered new projects and count towards this guideline
- Repowered: For repowered facilities to count towards our new goal, would require a significant investment in the repowering
- Target 50% of portfolio from new projects by 2025
- Current status

	2020	2021	2023	2024
% from New Resources	15%	24%	24%	24%

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TERM LENGTH TARGET

- Target 50% of portfolio from long term contracts
- Fill remainder of portfolio with diversity of contract lengths
- % of expected load

	2021	2022	2023	2024	2025
Short (<1 yr)	15%	15%	15%	15%	15%
Medium (1-4 yrs)	17.5%	17.5%	17.5%	17.5%	17.5%
Interm. (5-10 yrs)	17.5%	17.5%	17.5%	17.5%	17.5%
Long (>10 yrs)	50%	50%	50%	50%	50%

PENINSULA CLEAN ENERGY

TERM LENGTH STATUS

- Does not include hedge contracts in analysis below
- May not add to 100% due to open positions

	Target	2021	2022	2023	2024	2025
Short (<1 yr)	*15%*	6%	8%	0%	0%	0%
Medium (1-4 yrs)	*17.5%*	15%	15%	9%	0%	0%
Interm. (5-10 yrs)*	*17.5%*	16%	18%	12%	12%	12%
Long (>10 yrs)	*50%*	27%	26%	25%	25%	25%

*Includes Shiloh extension

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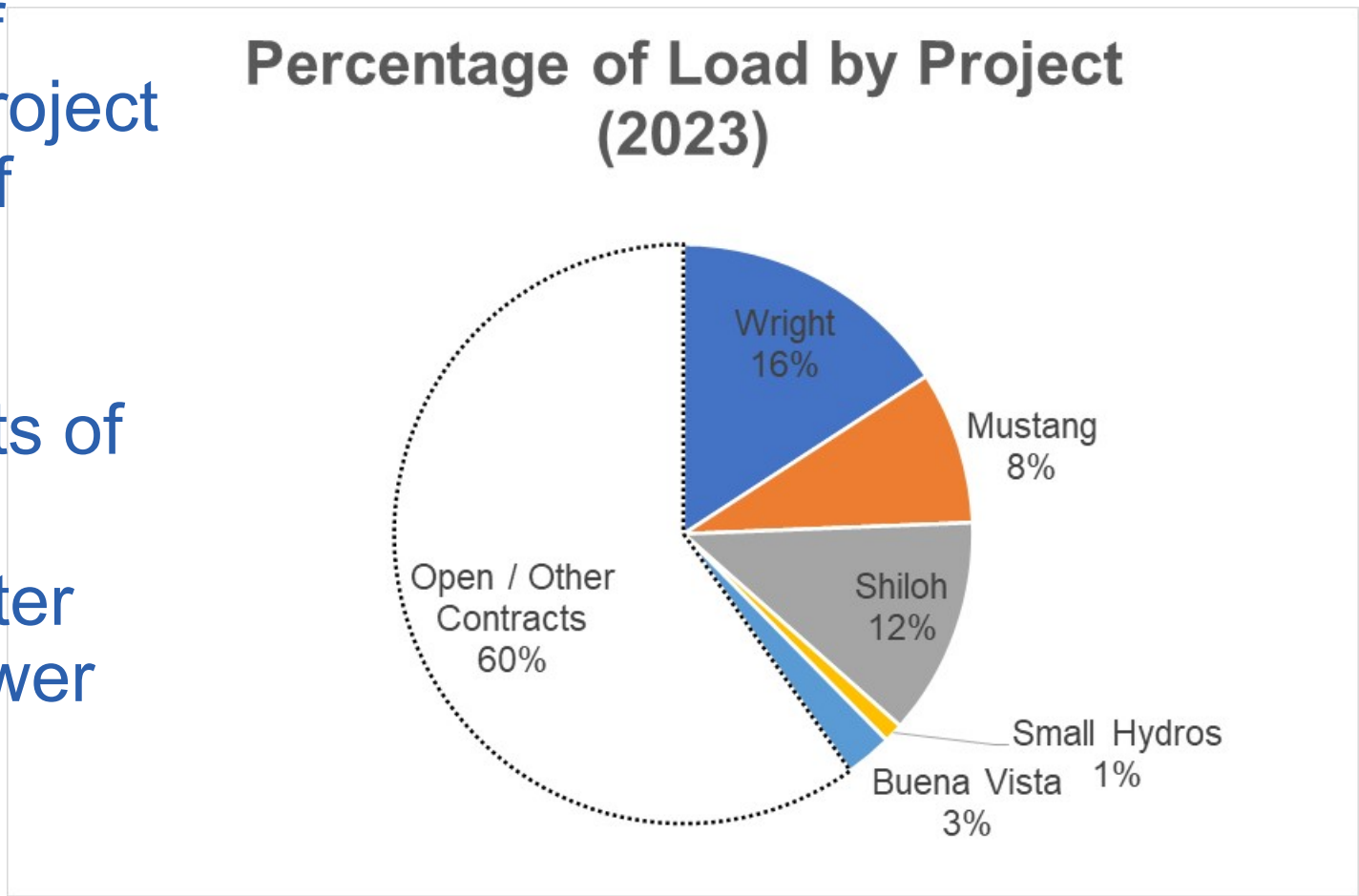
SIZE

- Target a diversity of sizes and no one project greater than 15% of load
- Load forecast incorporates impacts of COVID
- Wright slightly greater than 15% due to lower load forecast



OWNERSHIP

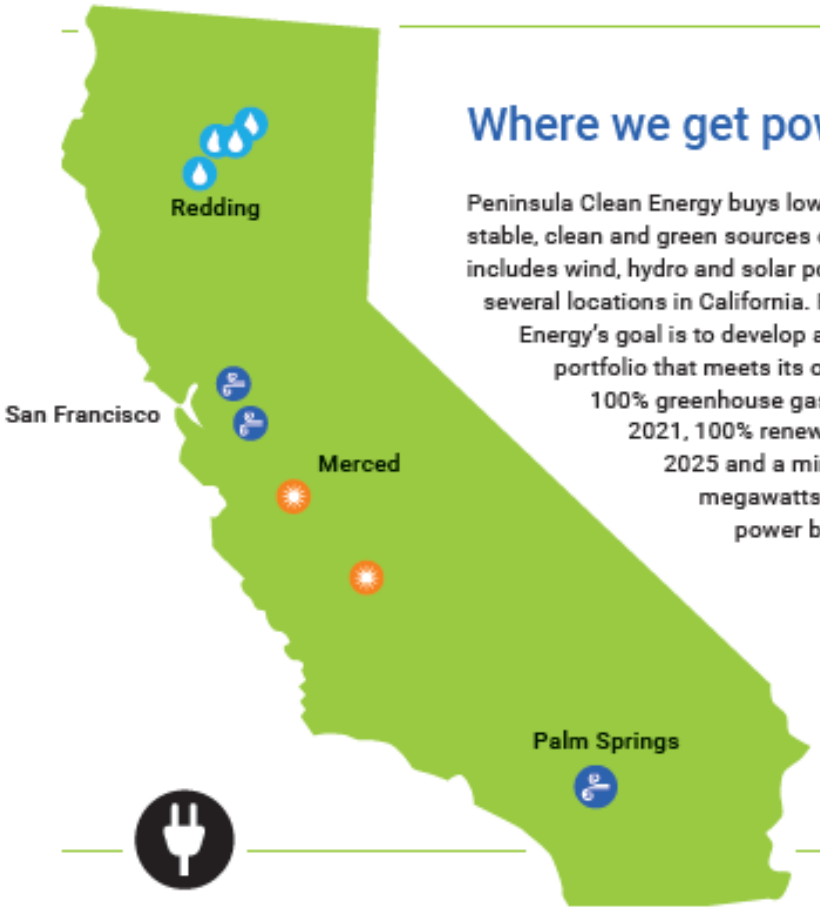
- We identified the following guidelines and take these into account in evaluating potential contracts
  - Limit exposure to any one developer / owner - No more than 15% of GWh load from any one owner
  - Ensure developer / owner has experience to develop / operate project
  - Financing plan and successful track record with finance organizations
  - Don’t work with owners that oppose CCAs
  - Financially stable organization
- Status: Aside from Wright, no owner makes up more than 15% of load

Clēnera Renewable Energy
CENTAURUS ENERGY, L.P.
idemitsu
LEEWARD Renewable Energy, LLC
AVANGRID
Mega Renewables
PENINSULA CLEAN ENERGY

LOCATION

- Limit exposure to price differentials between our service territory and project locations
- Limit exposure to any one pricing node
- Diversify generation profiles to aggregate portfolio to match load

LOCATION



Where we get power

Peninsula Clean Energy buys low-cost, price-stable, clean and green sources of energy. This includes wind, hydro and solar power from several locations in California. Peninsula Clean Energy's goal is to develop a diverse power portfolio that meets its objectives of 100% greenhouse gas-free power by 2021, 100% renewable energy by 2025 and a minimum of 20 megawatts of new local power by 2025.

Where are these power sources? Peninsula Clean Energy has Power Purchase Agreements for renewable energy with these facilities, listed with their generating capacity (in megawatts). These sources represent a portion of Peninsula Clean Energy's overall energy portfolio.

Solar

Wright
Merced County
200 MW

Mustang Two*
Kings County
100 MW

Wind

Shiloh
Solano County
150 MW

Buena Vista
Contra Costa County
38 MW

Karen Avenue
Palm Springs
11.7 MW

Hydro

Hatchet Creek
Shasta County
7.5 MW

Roaring Creek
Shasta County
2 MW

Bidwell Ditch
Shasta County
2 MW

Clover
Shasta County
0.99 MW

*Under construction

PENINSULA CLEAN ENERGY

TECHNOLOGY

- Peninsula Clean Energy does not prefer specific renewable technologies
- Goal is to procure from a diverse set of technologies
- Target no more than 25% from any one technology manufacturer
- In evaluating new projects, collect information on planned technology for primary equipment, but this may change during design process

Technology	%
Canadian Solar Modules	16%
Longi Modules	8%
Mitsubishi Wind Turbines	3%
GE Wind Turbines	12%

Regular Agenda

12. Board Members' Reports (Discussion)

Regular Agenda

Adjourn