



STRATEGIC FRAMEWORK PLAN UPDATE

Clean Energy Community Advisory
Commission 11.18.21

RECAP

- At 6/22/21 Council meeting, Community Energy (CED) staff directed by Council to return to Transportation & Environment (T&E) Committee in the fall with update on:
 - Business operations
 - Forecast of PCIA and next 12 months
 - Commercial paper loan repayment schedule
 - Suggested steps to make SJCE business more competitive and sustainable
- CED will bring this update to T&E on Dec. 6
 - Commissioned Deloitte to review performance versus 2017 business plan; review market trends; suggest opportunities to improve performance

CONTENTS

- Performance vs. 2017 plan
- Short-term outlook
- Market trends and forecast
- Opportunities and risk mitigation



PERFORMANCE VS. 2017 PLAN

With subtitle if needed

CUSTOMER PARTICIPATION – ON TRACK

	Projected			Actual			
	Load (GWh)	Customer Accounts	Participation Rate	Load (GWh)	Customer Accounts	Participation Rate	Opt-out %
2018	1,611	172,547	84%				-
2019	4,120	300,317	84%	3,458	326,630	91%	1.59%
2020	4,149	302,420	84%	4,013	345,506	96%	2.14%

Participation rate increases as service offered to whole city (NEM in 2020-21)

COSTS - HIGHER

Power Supply Costs

(\$/MWh)	Projected		Actual
	Match PG&E	PG&E + 10%	
2018	55.47	56.54	57.90
2019	56.87	57.78	70.06
2020	58.25	58.99	70.38

Brown power, RA, REC costs higher.

Non-Power Supply Costs

	Projected (\$)	Actual (\$)
2019	13,731,336	12,201,173
2020	13,915,167	17,592,637

Underestimated staffing, financing, data management (Calpine) costs

POWER MIX AND CO2 REDUCTIONS – ON TRACK

Actual Power Mix

Year	PG&E		SJCE	
	%RPS	%Carbon-free	%RPS	%Carbon-free
2018	39	85	48	100
2019	29	100	35	64
2020	31	84	46	89

2019 – SJCE bought some PCC3 RECs which didn't count for RPS beginning 2019. Reduced purchases of unbundled GHG-free attributes

SJCE Emissions - actual

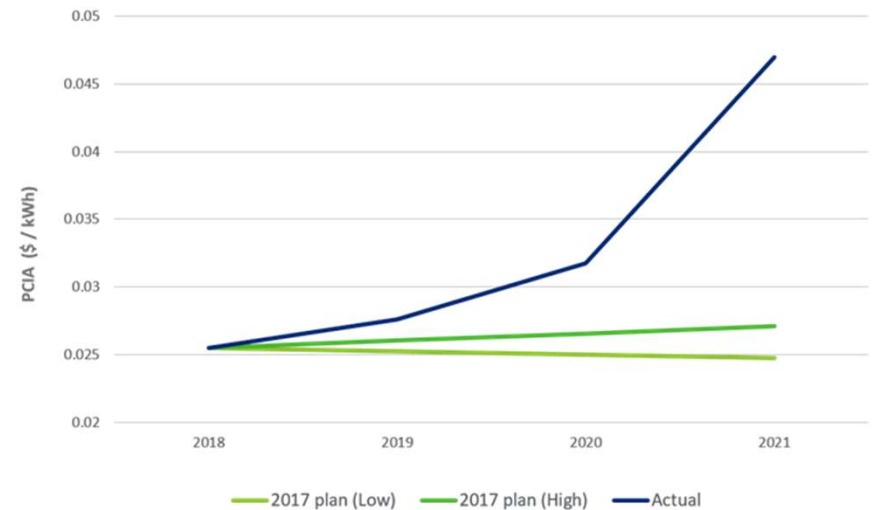
Year	Emission Factor (MT CO2e/MWh)	Total Emissions (MT CO2e)	YOY Emission reduction (MT CO2e)
2018			
2019	0.153	529,074	
2020	0.086	345,114	183,960

2017 plan for PG&E + 10% RPS called for 152,000-264,000 MT CO2e reduction in first full year of operations

RATES, SAVINGS, AND PCIA

2019-2020

- Bundled generation rates flat vs. plan estimate of 2.8%/year increase for 10 years
- SJCE GreenSource priced at 1% discount to PG&E vs. plan estimate of 7.45%
- PCIA up significantly



FINANCIAL POSITION – BELOW PLAN

Projected Financial Position (RPS+10% scenario)

RPS + 10%	Revenues (\$)	Power supply Costs (\$)	Other Expenses (\$)	Total Operating Expenses (\$)	Reserves (\$)
2018	99,120,259	78,520,386	7,937,562	86,457,948	11,491,429
2019	262,833,844	223,478,371	13,777,877	237,256,248	31,714,176
2020	273,708,163	234,666,751	13,959,373	248,626,124	51,441,366

Actual Financial Position

	Revenues (\$)	Power Supply Costs (\$)	Other Expenses (\$)	Total Operating Expenses (\$)	Reserves (\$)
2018	1,796,303	3,767,444	2,277,481	6,044,925	4,447,769
2019	290,873,358	248,466,175	12,201,173	260,667,348	38,962,876
2020	325,052,397	283,574,961	17,592,637	301,167,598	31,110,382

RISK FACTORS IDENTIFIED IN PLAN BUT MAGNITUDE NOT FULLY COMPREHENDED

- PCIA methodology change and resulting increases in PCIA
- Higher Brown Power (“BP”) costs because of a variety of market factors
- Higher Resource Adequacy (“RA”) Costs resulting from additional regulatory action and constraints on capacity
- Higher Renewable Energy Credit (“REC”) costs



BUSINESS UPDATE, SHORT-TERM OUTLOOK

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SINCE JUNE COUNCIL MEETING

- Summer had historically high prices but not catastrophic
- SJCE has borrowed \$36M from City through September – slightly below forecast
- Forecast for 2022 (PG&E ERRAs update 11/8):
 - PCIA going down (overcollection 2021, high power costs in 2022)
 - PG&E generation costs going up
- Anticipate beginning to repay commercial paper in late 2022, complete by June 2023

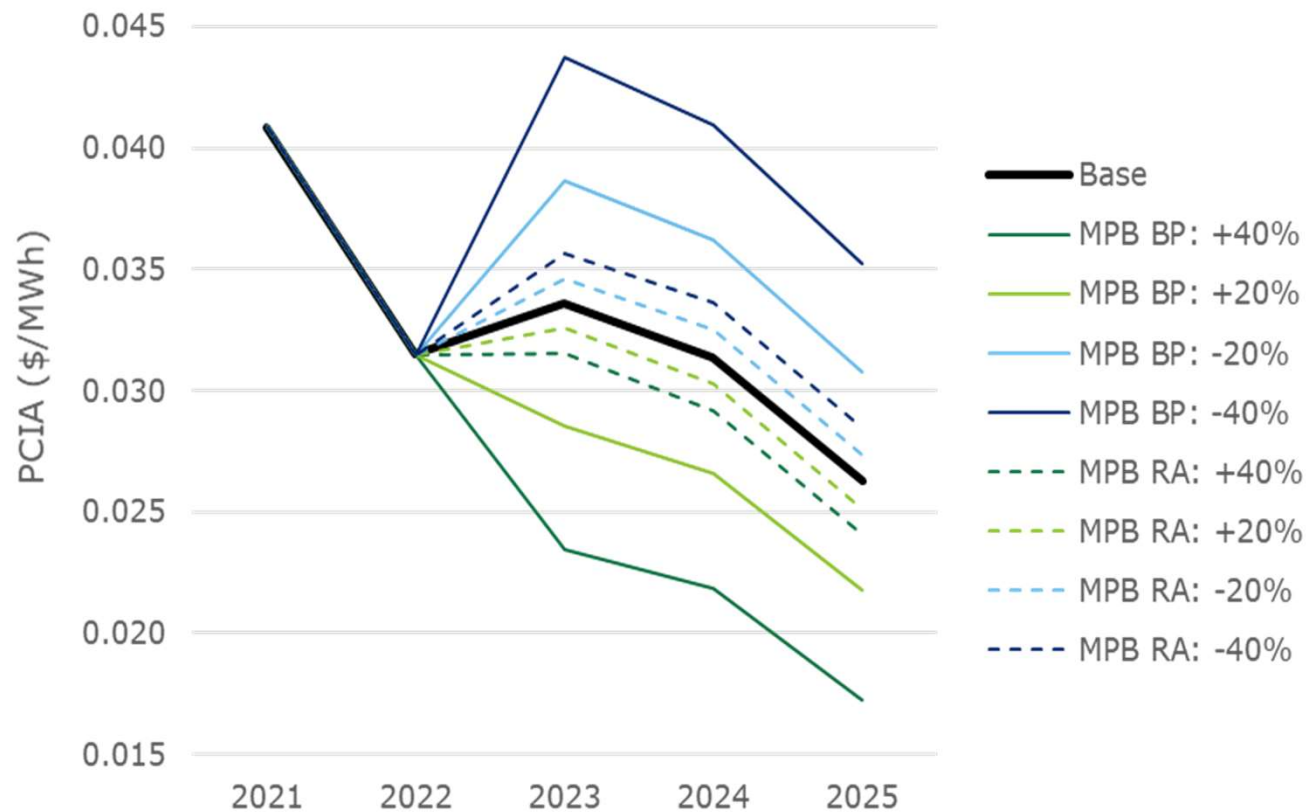




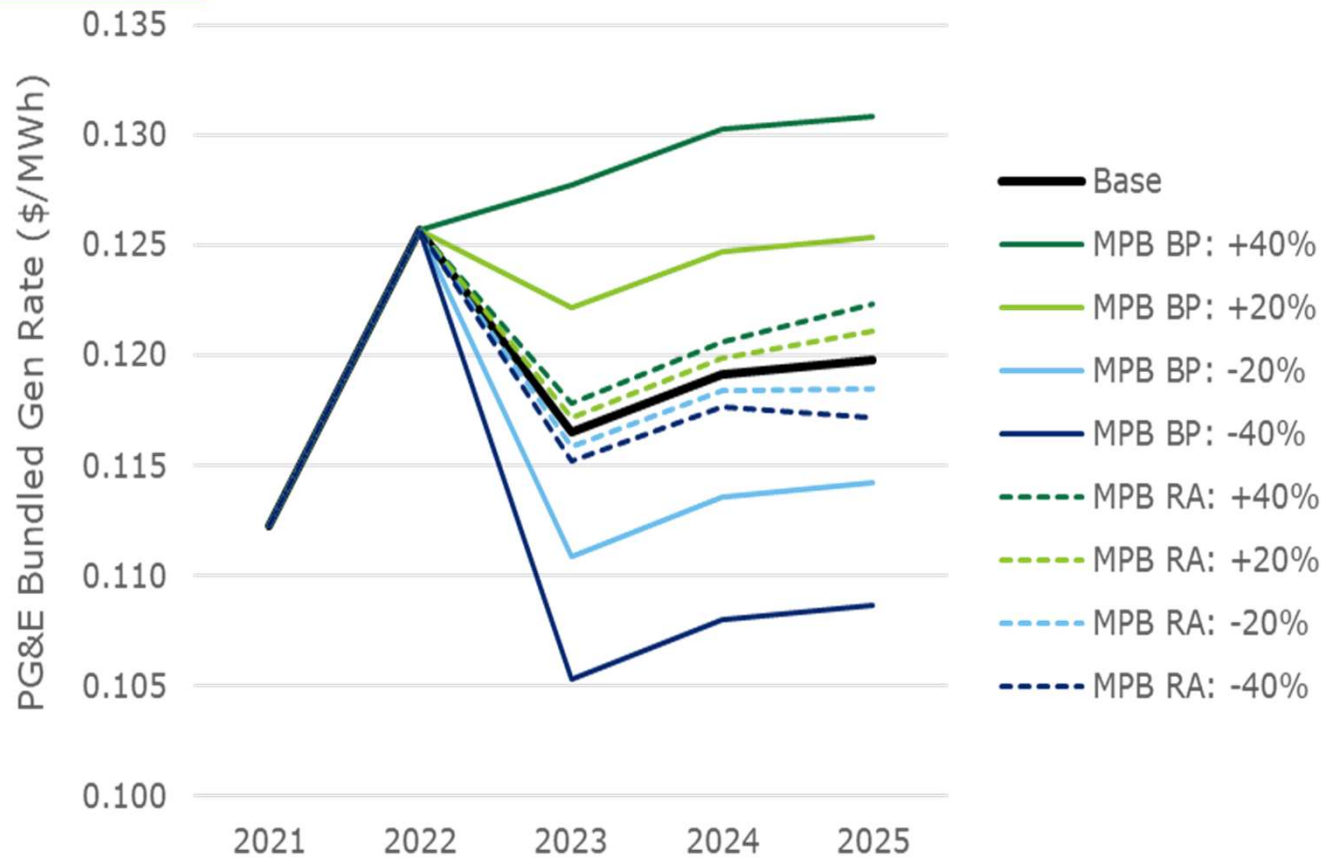
MARKET TRENDS/FORECAST

With subtitle if needed

MARKET TRENDS/FORECAST – PCIA

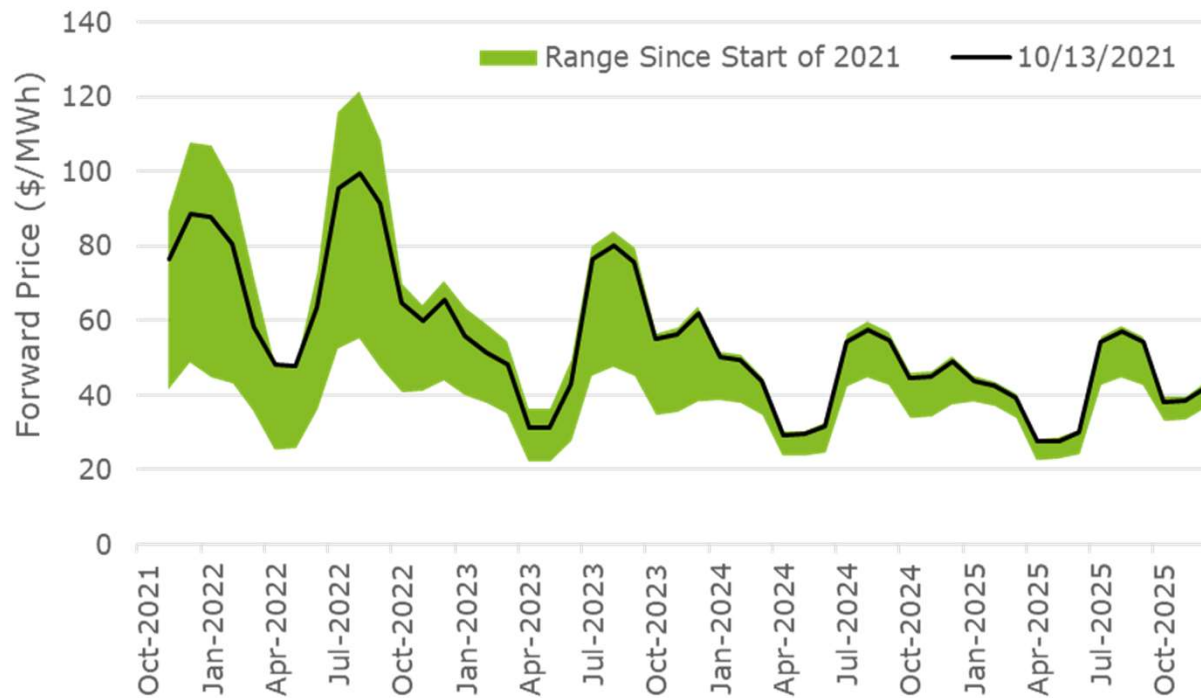


MARKET TRENDS/FORECAST – PG&E GENERATION RATE



MARKET TRENDS/FORECAST – POWER COSTS

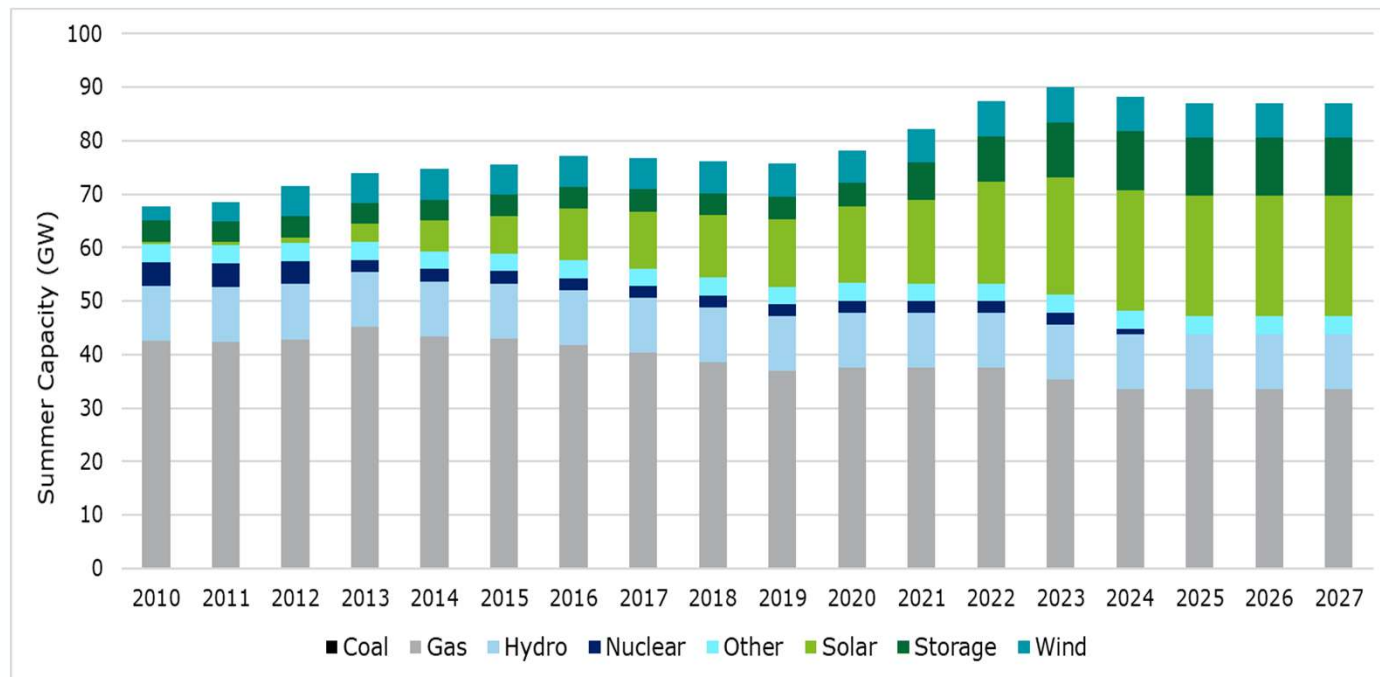
Range of Historical Forward Prices for NP15 Peak Power



Source: CME Group via S&P Capital IQ Pro

MARKET TRENDS/FORECAST – GENERATION CAPACITY

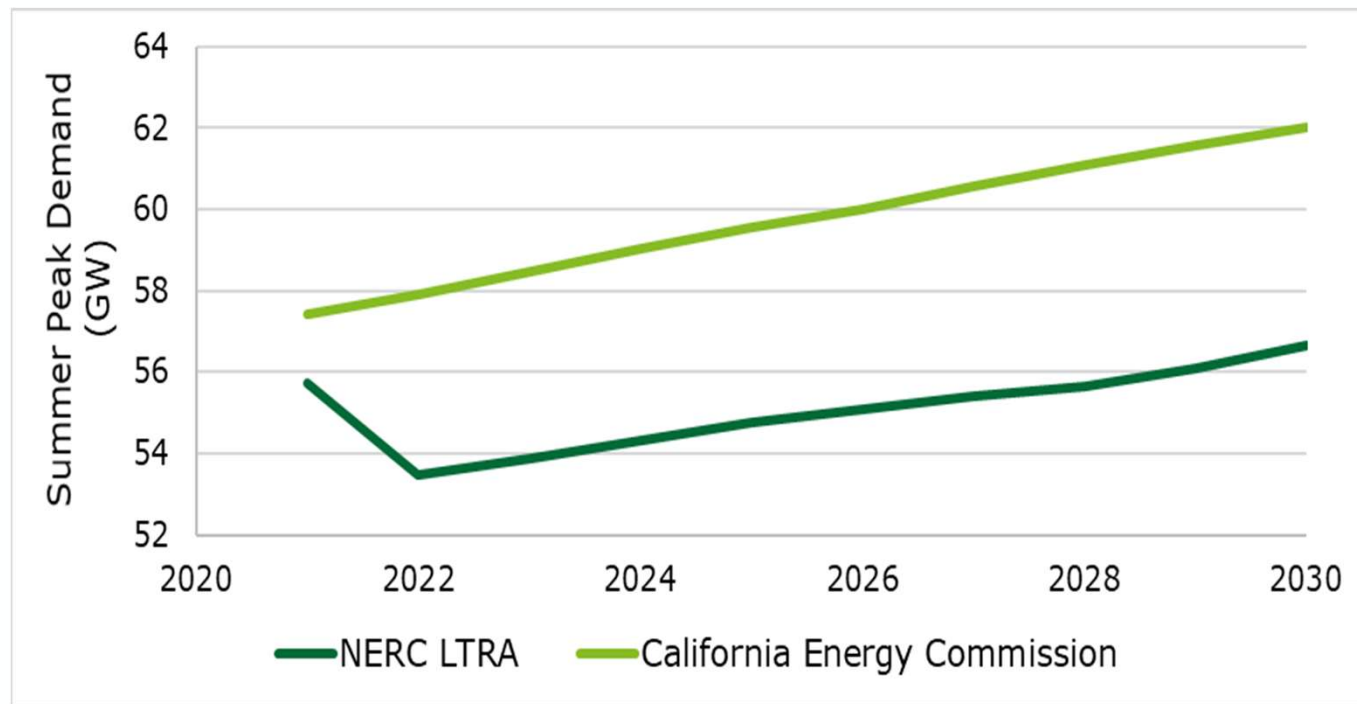
EIA Monthly Electric Generator Capacity in California (as of July 2021)



Source: US Energy Information Agency

MARKET TRENDS/FORECAST – PEAK DEMAND

Summer Peak Demand forecast in California until 2030



Sources: NERC Long-Term Reliability Assessment report; California Energy Commission

MARKET TRENDS

- Storage
 - Li-ion getting cheaper and still dominant
 - New chemistries have an opportunity given Li supply chain issues
 - Multi-day duration storage coming
- Hydrogen
- Demand-side load management
- Federal tax credits TBD: stand-alone storage; direct pay
- Regulatory
 - Central procurement trends threaten CCA autonomy
 - DERs policy taking shape – an opportunity



OPPORTUNITIES AND RISK MITIGATION

With subtitle if needed

ORGANIZATIONAL CLEAN ENERGY GOALS

- Continue to evaluate options (e.g. 24/7 renewable, science-based targets)
- Align with City's Climate Smart San Jose goals, including 100% carbon-neutral by 2030 (pending Council vote Nov. 8)



OPPORTUNITIES AND RISK MITIGATION

- More extensive scenario analysis
- Explore cost of service rates
- Consider executing additional medium- and long-term power supply contracts – requires additional credit capacity (collateral)
- Explore financial options and other derivatives
- Build reserve faster to protect against volatility
- Better processes, controls, reporting. Increase staffing