Consider and Possibly Recommend to the SVCE Board Changes to SVCE Rates and the Revised FY 2022 Budget

Amrit Singh

Finance and Administration Committee Meeting
November 29, 2021

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Overview

- Timeline
- Higher margins
- Estimated impact on budget
- Discussion on risk factors
- Price forecast implications
- Stress test
- Can Forecast be Improved
- Options on use of additional funds
- Reserve Analysis
- Recommendation
- Adopt Revised Budget
- Recommend for Board Approval

Timeline

Dec 2020

Board approves changing SVCE rates to maintain a 1% Discount (from 4%) to PG&E Gen Rates, effective Jan 2021.

March 2020

Board approves to maintain 1% discount rate to PG&E Gen Rate in response to increase in PCIA and PG&E Gen Rate.

Sept. 2021

Board approves FY 22 budget that anticipates significant decrease in PCIA and increase in PG&E Gen Rate and maintains 1 % discount rate. Board to reconsider discount rate in Dec when there's more certainty on PG&E rates and PCIA.

Nov 2021

The Executive Committee (EC) reviews updated SVCE margin analysis based on the newly released PG&E Gen Rate and PCIA projections. EC reaches consensus to spend an additional $20 million from the FY 22 budget.

Nov/Dec 2021

Special session of the Finance and Administration Committee meeting to share same information as that shared with the EC.

Dec 2021

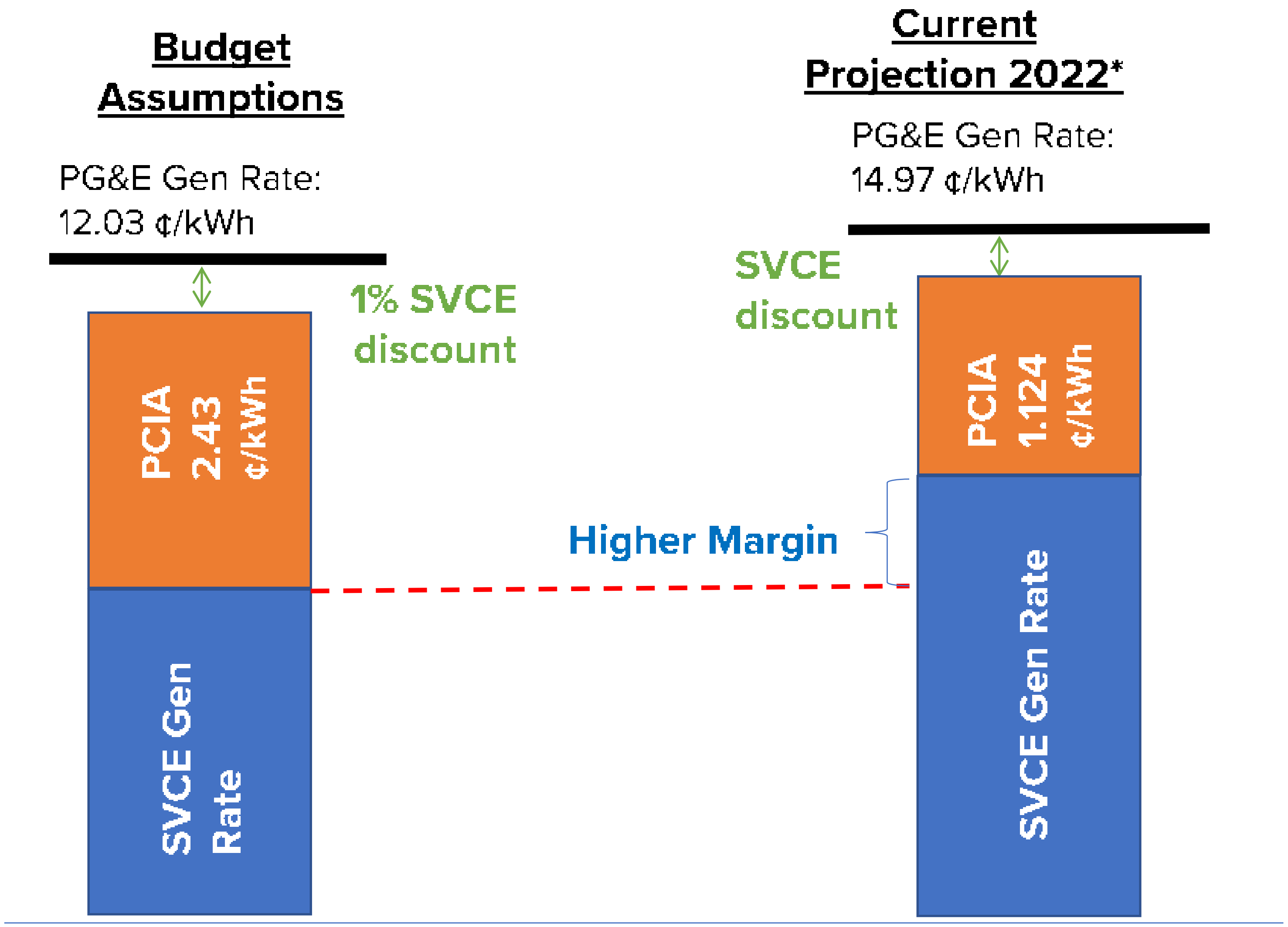
Board adopts revised budget and authorizes rate changes.

Jan 2022

New SVCE rates go in effect.

PG&E ERRA Update Results in Higher Margin than FY 22 Budget Assumptions

- Relative to assumptions in the FY 22 Budget:
  - PG&E's generation rate is expected to increase by about 24%
  - PCIA is expected to decrease by about 54%
- Relative to Budget, SVCE's margin improve by about 44% (in calendar year 2022)
- CPUC to approve actual rates in late December



* Source: PG&E 2022 ERRA Forecast Application

Estimated Impact on Budget

*Based on **preliminary** calculations.*

FY 22 Budget ($ in thousands)	Budget	Current Estimate	With Revised Margins**	Variance (Budget to Revised Margins)
Revenues*	341,635	348,946	434,222	92,587
Power Supply Cost	273,561	293,558	293,558	19,997
Operating Margin	68,074	55,388	140,664	72,590
Other Costs	31,590	31,590	31,590	-
Net Contribution to Reserves	36,484	23,798	109,074	72,590

* *Potential customer write-offs included in other costs.*

** *Assumes 1% customer discount.*

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Risk Factors to Consider

- Higher margins result from extreme increase in power market prices (black-swan type event).
  - PG&E Gen Rate also increased because of under recovery in ERRA account
- Black-swan type events that can affect us adversely in the future can draw substantial funds from the reserves and/or increase customer rates to uncompetitive levels.
- PCIA is based on current estimated market price benchmark (MPB) from the CPUC.
  - If realized prices are lower than MPB, then PCIA will be under collected and the under collection will raise 2023 PCIA rates

Commodity Price Implications on PCIA/Gen Rates

- 2022 forward prices are at all time high.
  - Extreme case of runup in prices
- Most of the increase occurred in the last 12 months
- Can't predict future but price trends could reverse, and prices could drop equally or more.
  - Leads to substantial draw from reserves

2022 Forecast as of Nov 2021	2022 Actuals Low Case Scenarios	Percentile
$ 67		
	$ 34	5%
	$ 33	1%

Stress Test – Market Prices Plunge

Assumes market prices drop to historical lows (1 percentile).

($ in thousands)	Cal 2023 Forecast	Stress Test 1.**	Stress Test 2.***
Revenues*	394,111	96,629	96,629
Power Supply Cost	251,249	219,867	251,249
Operating Margin	142,862	(123,238)	(154,620)
Other Costs	33,663	33,663	33,663
Net Contribution to Reserves	109,199	(156,901)	(188,283)

* *Potential customer write-offs included in other costs.*

** *Hedges for Cal 2023 at current 70% level. Assumes 1% customer discount.*

*** *Assumes Cal 2023 is hedged 100% at today's prices. Assumes 1% customer discount.*

Can we improve our forecast?

Any modeling improvement will not eliminate the biggest contributor to uncertainty: Market Price Movements

- Biggest source of uncertainty is market price volatility
- Can models be improved to eliminate significant amount of actual to forecast variances?
  - To a large extent, no
    - Market price volatility remains *(to the extent not perfectly hedged)*
    - PCIA and PG&E generation rate calculations come from a blackbox
      - Do not know the PCIA and PG&E generation portfolio positions
      - CalCCA model is based on public information
- Changing our hedging strategy to account for improved modeling of PCIA and PG&E Generation rate could reduce risk

Options for use of Improved Margins

1. Hold in reserves for future black swan events
    - Forecast days cash on hand (DCOH) from FY 2022 budget: 233
    - Increase in DCOH with improved margins after adjustment for FY 21 loss: 78
    - Expected DCOH for FY 2022: 311
        - Minimum target: 120 Days
        - Target: 230 Days
        - Maximum: 320 Days
    - The black swan event/stress test modeled would use 189 – 227 DCOH.
2. Add funds to programs double down strategy
    - Currently programs are funded at 2% of revenues. Each 1% adds ~$4.3 million.
3. Increase customer discount
    - Every 1% increase in customer discount diverts ~ $6 million from reserves.
4. Combination of above

Reserve Analyses – Days Cash on Hand (DCOH)

Stress Tests	Beg. 2023 Forecast of Reserves (DCOH)	Draw on Reserves from Stress Case (DCOH)	Remaining (DCOH)	Available for Use* (Maintaining Min. Reserve Threshold of 120 DCOH)	Available for Use in $ Millions	Expected Case FY 22 Forecast of Reserves (DCOH)
Price Drop to 1 percentile (100% Hedged Case)	348	227	121	1	1	310
Price Drop to 1 percentile (70% Hedged Case)	348	189	159	39	32	272

* *Target to maintain 120 DCOH under the stress case scenario while ensuring that on an expected basis DCOH does not drop below the target threshold of 230 in FY22 .*

- Recommendation: Maximum additional spend should be within the range of $1 to $32 million based on the above stress test analyses.

- Other Considerations:
  - In the year the stress case event occurs, SVCE can also mitigate the financial impact with higher customer rates. Other CCAs have had rates higher than PG&E.
  - On an expected basis, PCIA should trend down as PG&E continues to recover stranded costs.

Recommendation on Use of Fund

- Staff recommends additional spend from FY 22 budget of $20 million.
- The Executive Committee (EC) at its Nov. 17, 2021, meeting reached consensus to spend an additional $20 million from the FY 22 budget.
  - On how to allocate the $20 million between programs and additional customer discount, the EC decided to have that discussion at the December Board meeting.
- Table below shows some options in allocating the $20 million between additional funding for programs and additional customer discount:

Allocate to Programs Double Down Strategy* (Spend will occur over 3-to-5-year period)	Customer Discount % Relative to PG&E Generation Rate
20 million	1% (existing discount)
15.5 million	2% (add'l 1%)
11 million	3% (add'l 2%)

**Inclusive of equity program allocation to focus on low-income customers.*

Adopt Revised Budget

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FY 2021-22 PROPOSED REVISIONS to OPERATING BUDGET (SUMMARY)
($ in thousands)

	FY 2021-22 Adopted BUDGET	FY 2021-22 RECOMMENDED BUDGET	VARIANCE $	VARIANCE %
Energy Revenues	339,073	431,660	92,587	27%
Power Supply Expense	273,561	293,558	19,997	7%
Operating Margin	**65,511**	**138,102**	72,591	111%
Operating Expenses	22,407	22,407	0	0%
Non-Operating Revenue/(Expense)	310	310	0	0%
Transfers and Other Expenses	6,931	27,531	20,600	297%
BALANCE AVAILABLE FOR RESERVES	**$36,483**	**$88,474**	**$51,990**	

The above table assumes $20 million transfer to the program budget. The actual amount of transfer will depend on the option selected in the previous slide.
The program fund also includes an additional $600,000 for savings from PG&E nuclear allocation approved by the Board at the November 2021 meeting.

Recommend for Approval

- Staff requests that the Finance and Administration Committee recommend that the Board:
  1. Adopt a revised budget to:
     - Provide a __% discount to PG&E generation rates effective January 1, 2022, based on PG&E's November AET Filing, provided the CPUC does not delay the AET rate increase
     - Account for increase in power supply expense (~$20 million)
     - Transfer additional $___ to the programs fund
  2. Authorize SVCE to change rates effective January 1, 2022, that reflects a __% discount to PG&E generation rates based on PG&E's November AET Filing, provided the CPUC does not delay the AET rate increase
     - Adjust rates effective February 1, 2022, based on CPUC adopted AET rates
  3. **Readjust** rates and budget accordingly within 3 weeks of January 1, 2022, if the CPUC approves PG&E's generation rates and PCIA that would result in SVCE rates that are 10% on average lower than the expected rate based on PG&E's November AET filed rates.
     - Readjust rates to provide a **1%** discount to the AET approved PG&E generation rates; True-up any overcollection that resulted within first few weeks of January
     - Do not transfer additional funds to Programs; Revisit funding for Programs at Mid-Year Budget
     - Revisit customer discount at the January 12, 2022, Board Meeting

Thank you! / Questions?

Challenges in Forecasting Headroom

- Energy price in the current and prior year have the largest impact on headroom (cash reserves).
- Based on historic price analysis Scenarios 1 and 4 are more common than Scenarios 2 and 3.
- Additional Headroom Drivers
  1. 2021 Gen Rate (ERRA balance)
  2. 2021 PCIA (PABA balance)
  3. 2022 Net Revenue Increase

Key:

+ + +

\+ 2021 Gen Rate Increase (ERRA Under collection)
\+ 2021 PCIA Decrease (PABA Over collection)
\+ 2022 Net Revenue Increase

\- - -

\- 2021 Gen Rate Decrease (ERRA Over collection)
\- 2021 PCIA Increase (PABA Under collection)
\- 2022 Net Revenue Decrease

2022 Energy Price Change (Forecast, Now – Forecast at budget)

2021 Energy Price Change (Actual – Forecast)		+	-
	+	Scenario 1 Large increase to cash reserves + + +	Scenario 2 Muted impact on cash reserves
	-	Scenario 3 Muted impact on cash reserves	Scenario 4 Large decrease of cash reserves - - -

Stress Test – Market Prices Plunge

Assumes market prices drop to historical lows (5th percentile).

($ in thousands)	Cal 2023 Forecast	Stress Test 1.**	Stress Test 2.***
Revenues*	394,111	154,119	154,119
Power Supply Cost	251,249	231,958	251,249
Operating Margin	142,862	(77,839)	(97,130)
Other Costs	33,663	33,663	33,663
Net Contribution to Reserves	109,199	(111,502)	(130,793)

* *Potential customer write-offs included in other costs.*

** *Hedges for Cal 2023 at current 70% level. Assumes 1% customer discount.*

*** *Assumes Cal 2023 is hedged 100% at today's prices. Assumes 1% customer discount.*

Reserve Analyses – Days Cash on Hand (DCOH)

Includes less stressful scenarios where prices drop to the 5th percentile.

Stress Tests	Beg. 2023 Forecast of Reserves (DCOH)	Draw on Reserves from Stress Case (DCOH)	Remaining (DCOH)	Available for Use* (Maintaining Min. Reserve Threshold of 120 DCOH)	Available for Use in $ Millions	Expected Case FY 22 Forecast of Reserves (DCOH)
Price Drop to 1 percentile (100% Hedged Case)	348	227	121	1	1	310
Price Drop to 1 percentile (70% Hedged Case)	348	189	159	39	32	272
Price Drop to 5th percentile (100% Hedged Case)	348	158	190	70	58	241
Price Drop to 5th percentile (70% Hedged Case)	348	134	214	81	67	230

* *Target to maintain 120 DCOH under the stress case scenario while ensuring that on an expected basis DCOH does not drop below the target threshold of 230 in FY22 .*

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2023 Forward Price Stress Scenarios

2023 Forecast as of Nov 2021	2023 Low case scenarios	Percentile
$ 55		50%
	$ 44	5%
	$ 34	1%

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ERRA Forecast Update

November 29, 2021

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2022 Model Run Compared to Budget

NewGen Numbers:

- Calendar Year
- Not load weighted
- Not adjusted for discount

PG&E Numbers:

- Calendar Year
- Load weighted
- Not adjusted for discount

2017 Vintage Calendar Year	2021 Rates PG&E AET* 12/30/21	2022 Rates BUDGET 7/16/21**	2022 Rates PG&E Nov. Update 11/8/21
PG&E Gen Rate ($/kWh)	0.1096	0.1215	0.1497
PCIA (cents/kWh)	0.0459	0.0229	0.0112
Headroom (cents/kWh)	0.0638	0.0986	0.1385
Assumptions			
On-Peak Energy Price ($/MWh)	43.16	56.75	72.96
Off-Peak Energy Price ($/MWh)	35.50	42.54	58.34
System Capacity Price ($/KW-mon)	6.10	7.25	6.03
Local Capacity Price ($/KW-mon)	6.15	7.25	6.35
Flex Capacity Price ($/KW-mon)	5.69	7.25	6.41

* AET is the Annual Electric True-up that finalizes the rates based on changes across all proceedings.
**Based on NewGen Model run with SVCE assumptions

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PG&E Generation Rate

- The PG&E Generation Rate (Gen Rate) increased over 35% between 2021 and 2022.

- The large increase is mainly due to extremely high energy prices driven by high gas prices.

	2021	2022
Gen Rate ($/kWh)	0.1096	0.1497
On-Peak Price ($/MWh) [1]	43.6	72.96
Off-Peak Price ($/MWh)[1]	35.5	58.34
Gas Prices at PG&E City Gate ($/MMBtu)[2] [Winter Futures]	3.80	7.00

1 Market Price Benchmark issued by CPUC
2 Data from Intercontinental Exchange

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PG&E Generation Rate (continued)

- The other driver of the high Gen Rate is due to the difference between the forecast energy price and the actual energy price.
- The energy prices in 2021 were higher than the forecast resulting in bundled customers paying less than they should.
- This “undercollection” is added to the 2022 prices thus compounding the increase in the 2022 Gen Rate.

		2021 Forecast	2022 Forecast
Energy Price ($/MWh)	On-Peak	43.6	72.96
	Off-Peak	35.5	58.34

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Market Price Benchmarks 2019-22

		2019 Final	2020 Forecast	2020 Final	2021 Forecast	2021 Final	2022 Forecast
Energy Index ($/MWh)	On-Peak		36.88		43.6		72.96
	Off-Peak		29.93		35.5		58.34
RA Adder ($/kW-month)	System RA	2.77	4.59	5.20	6.10	7.33	6.03
	Local RA	3.19	4.11	5.02	6.15	6.31	6.35
	Flexible RA	2.78	4.41	4.65	5.69	5.39	6.41
RPS Adder ($/MWh)		16.44	17.35	15.10	14.49	14.23	13.7

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Timeline

- Week of October 18: Assumptions Review, Revise Analysis
- November 1: CPUC issues MPBs
- November 8: PG&E Issues Updated PCIA and Gen Rate for 2022
- November 15: PG&E Issues Preliminary AET
- By mid to late November: NewGen and MRW 2022 Updated Forecasts
- Late November / Early December: Proposed Decision Issued
- Late December: Final Decision, Final Annual Electric True-up (AET) filed
  - The 2022 PCIA and Gen Rate will become final once PG&E Files the AET
- January 1, 2022: New Rates Implemented
- Q1 2022: PCIA allocation revised due to update of the 2020 GRC Allocation Factors

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