

MEMBER GENERATION: RATE ANALYSIS

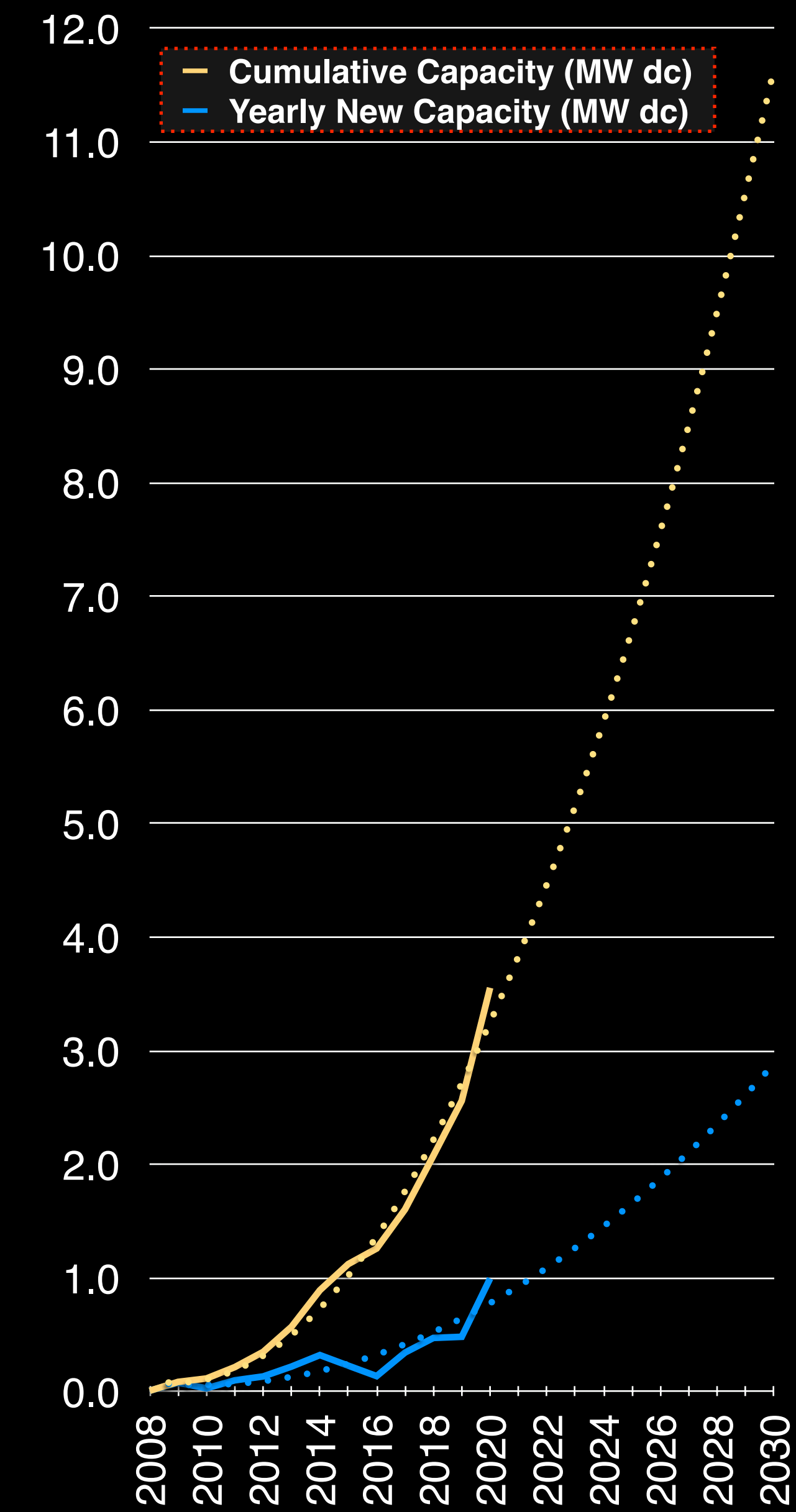
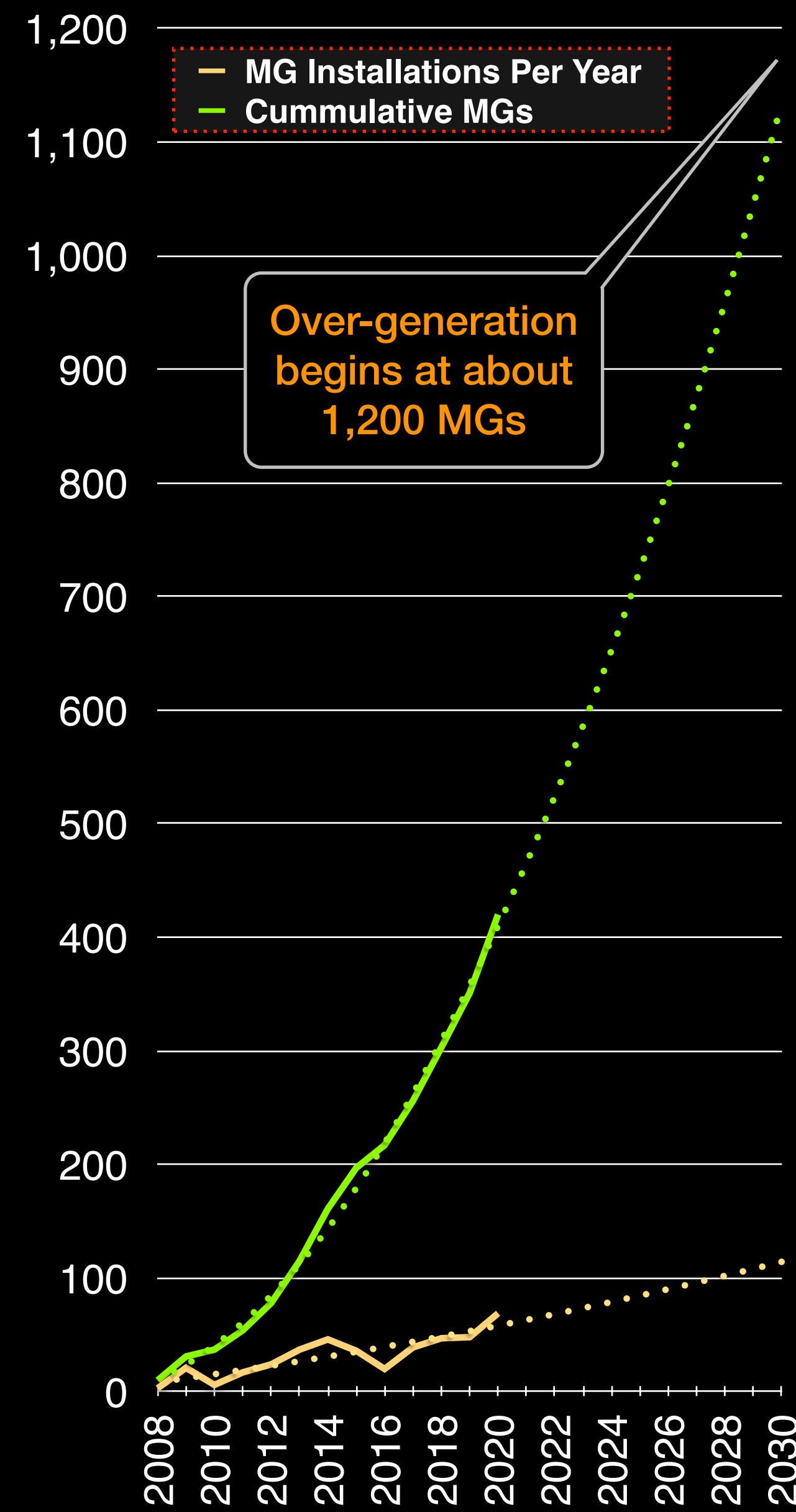
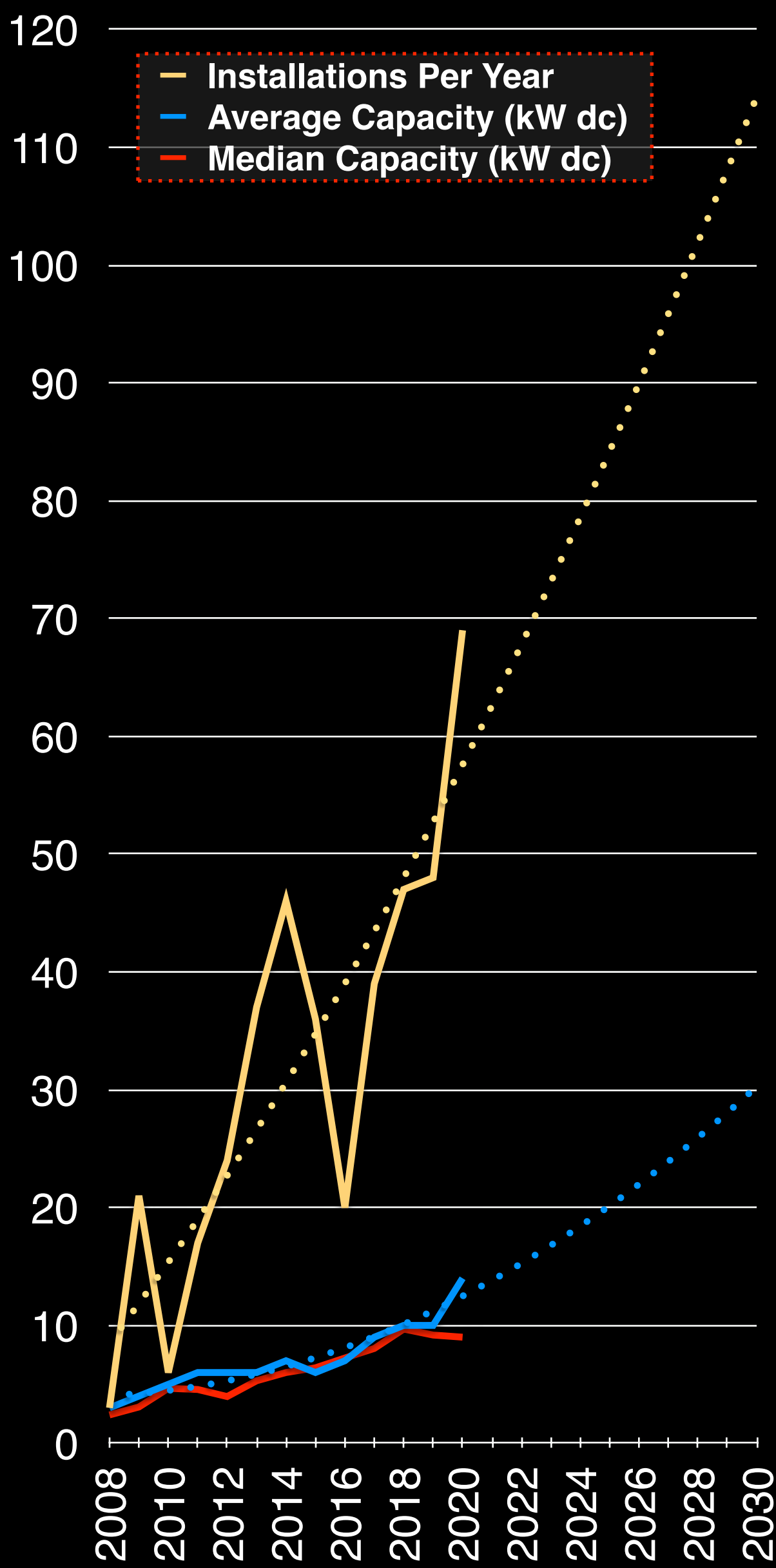
OPALCO

Board Meeting
September 2021

Rates Review: Timeline

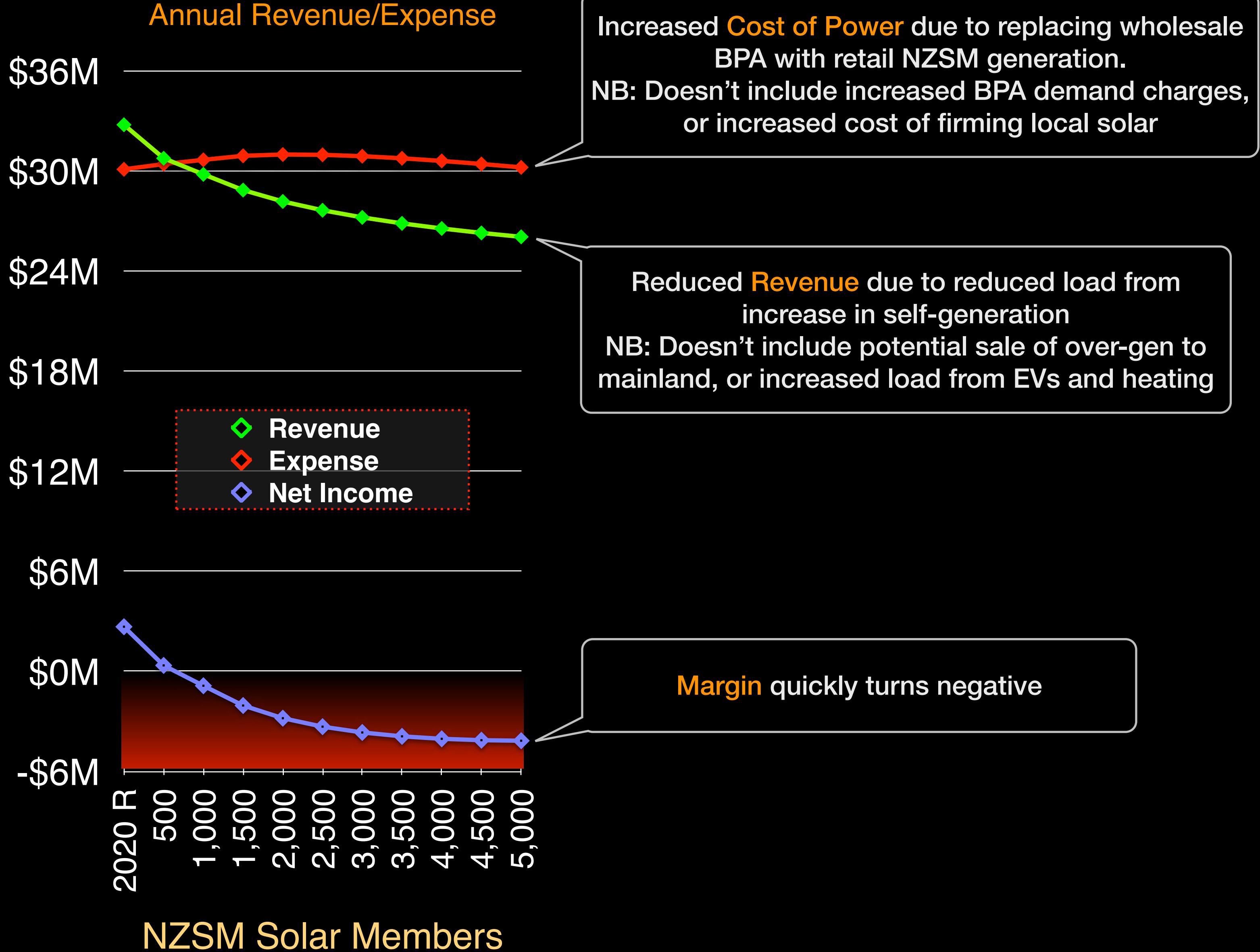
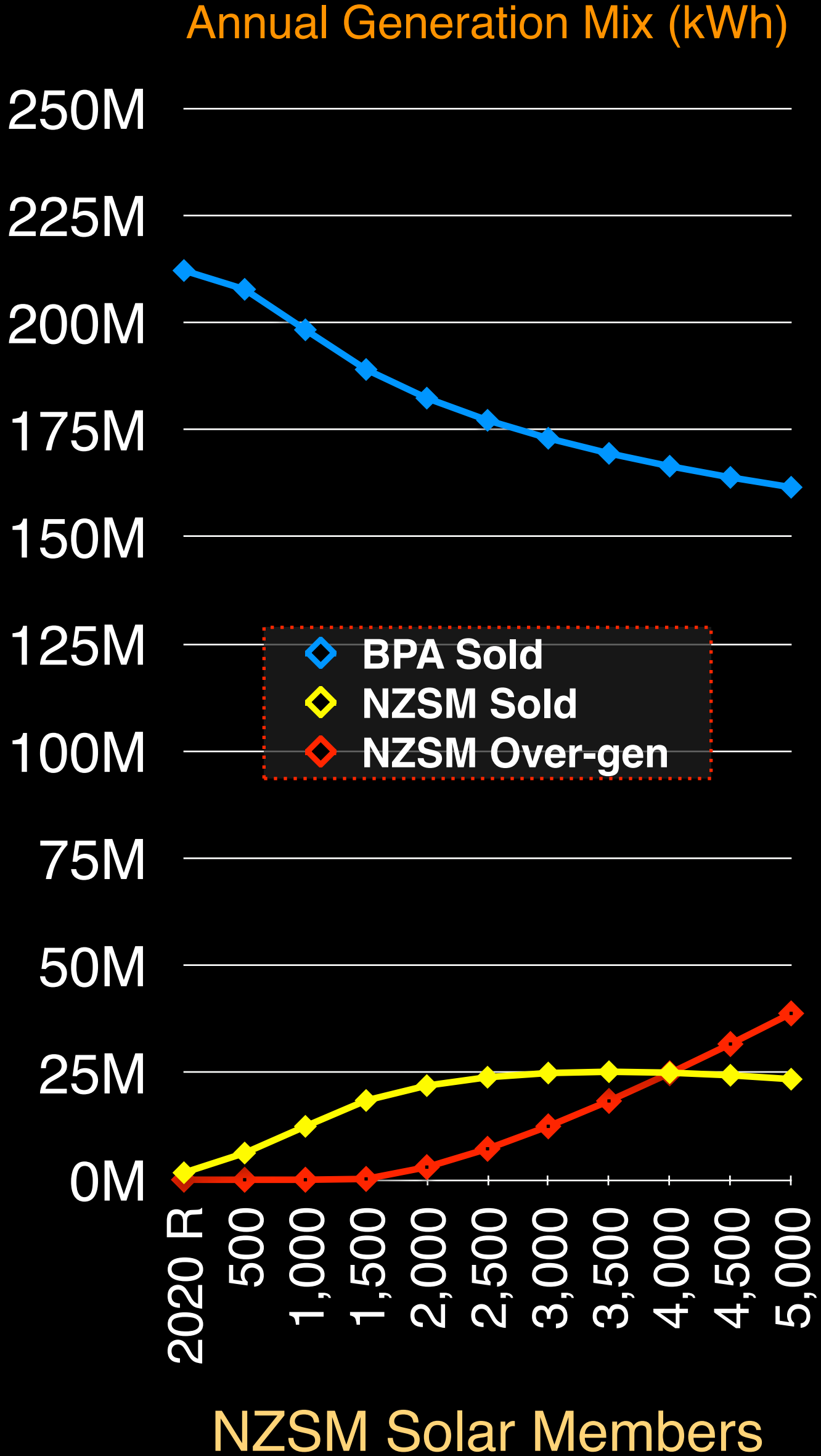
✓	May 2021	Member generation trends and modeling
✓	June	Internal staff review
✓	August	Guernsey review of alternatives
✓	September	Impact on co-op members (low-income, low-use, high-use, etc.)
	Late September	Solar Town Hall - member feedback
	October	Rate Options Review
	November	Budget and 2022 Rate Proposal (first read)
	December	2022 Rate Structure (second read), 1/2022 rate implementation
	January	Rate implementation

OPALCO Member Generation Trends: Installations, Capacity, Production



13.2 MWh AC Production in 2030
From 12 MW dc of total member
generation capacity
Average 30 kW dc per installation

Impact on Financials: Reduced Revenue, Increased Expense



Billed Versus Actual Cost as a % of Total Cost

Typical OPALCO Residential Bill

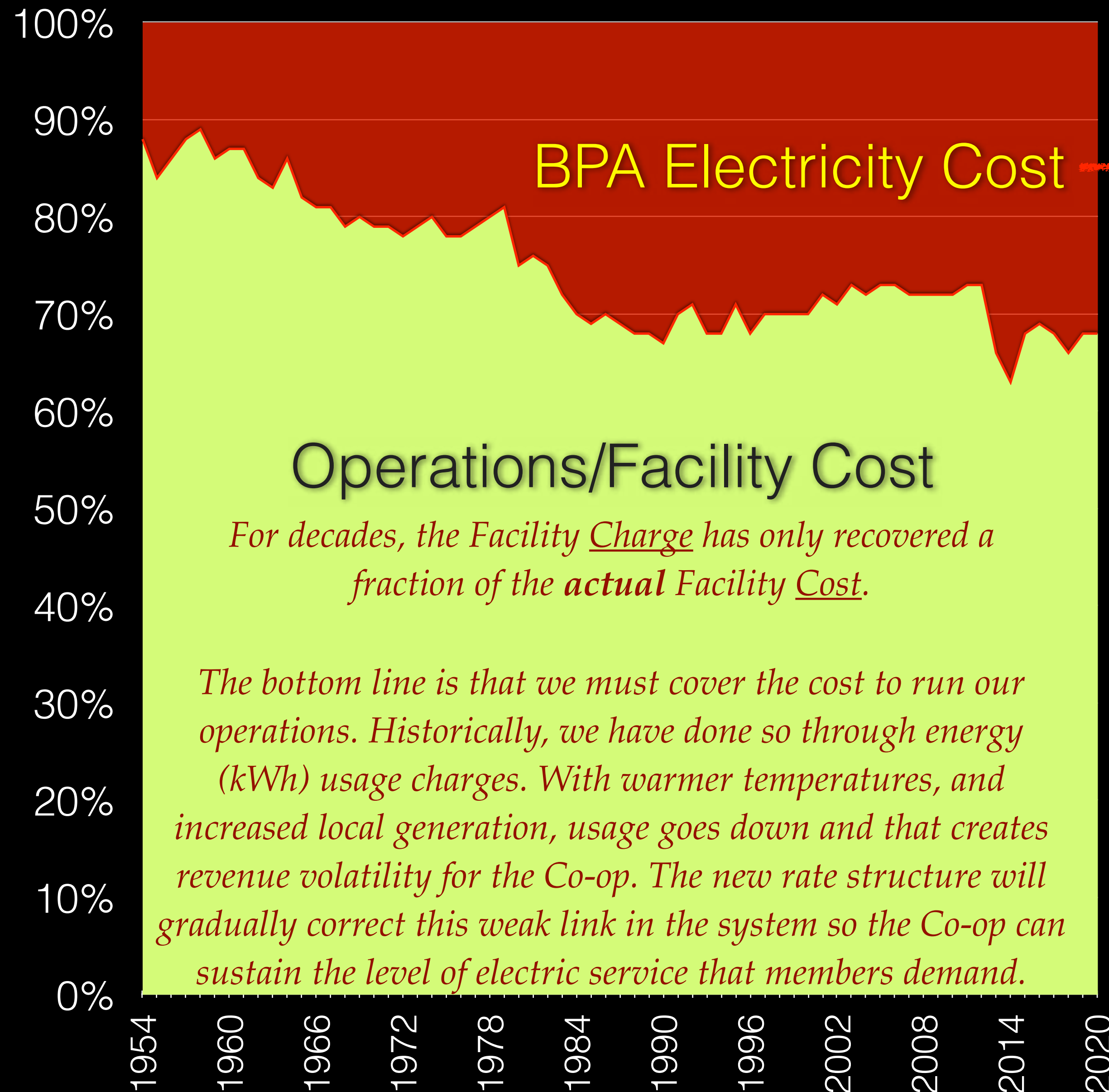
Usage Charge

top heavy - leads to over charging in cold winters and undercharging in warm winters

Facility Charge

2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020

Actual OPALCO Costs



78%

Energy

Other

2%

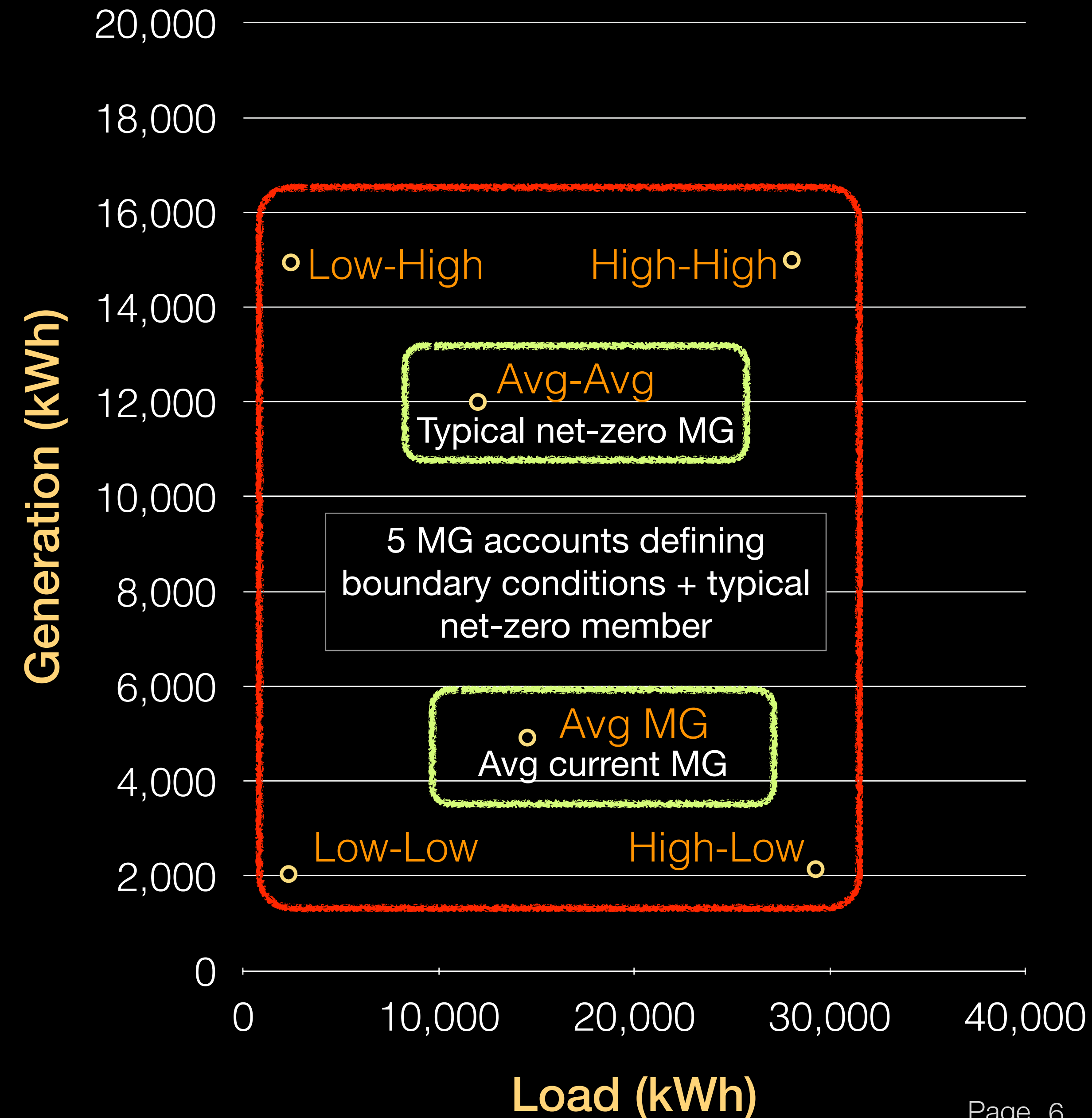
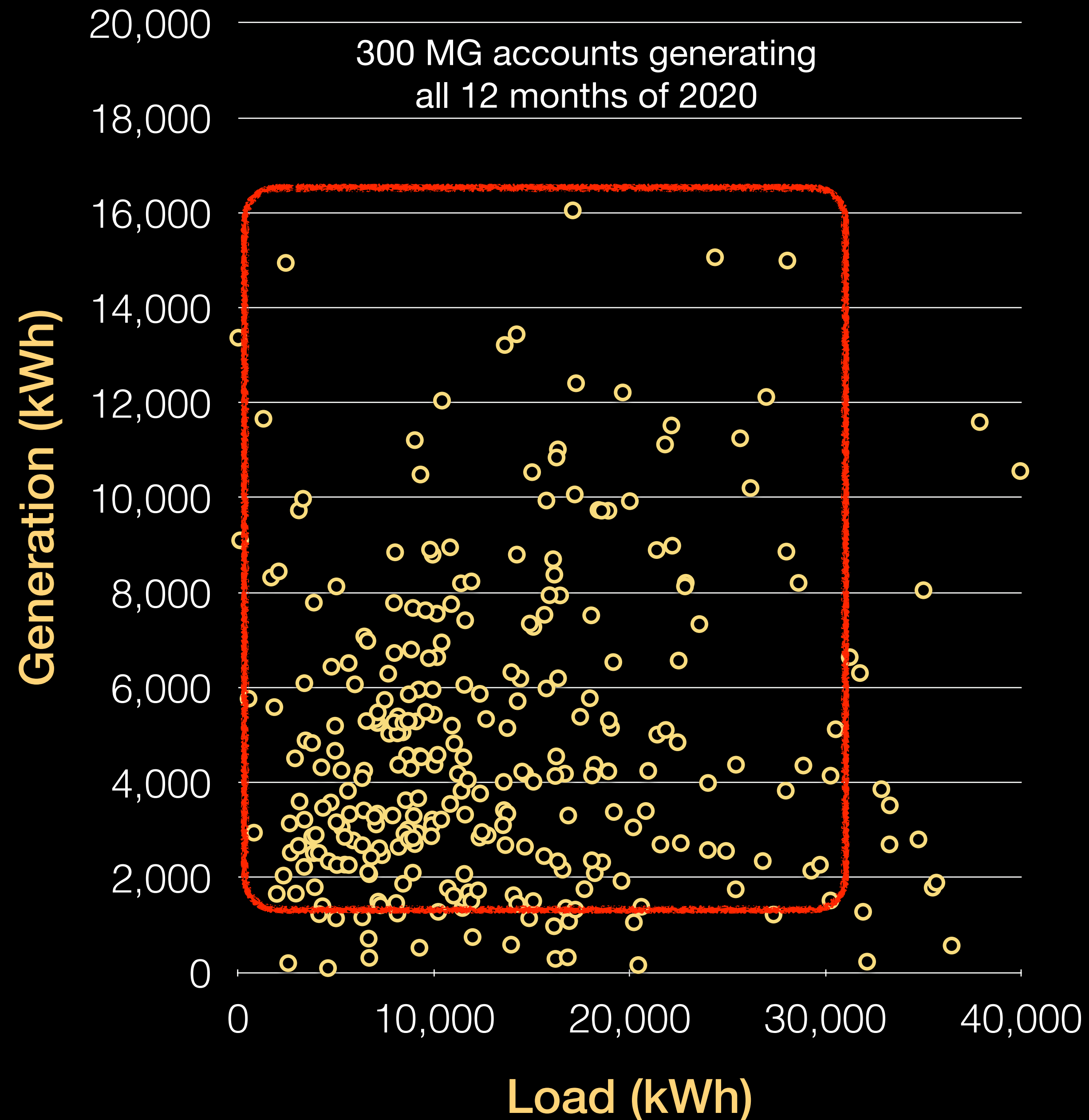
Demand

9%

Transmission

11%

Member Generators: 2020 Annual Load and Generation Distribution



Example Residential MG Average Monthly Billing Comparison

Using 2020 reference load and generation for four boundary MG + NZSM examples

Consumption kWh Rate at Block 1 (power in)

+ 4.7049¢ Purchased Power In Cost
+ 6.1851¢ Grid Access In Cost
= 10.8900¢ Cost per kWh

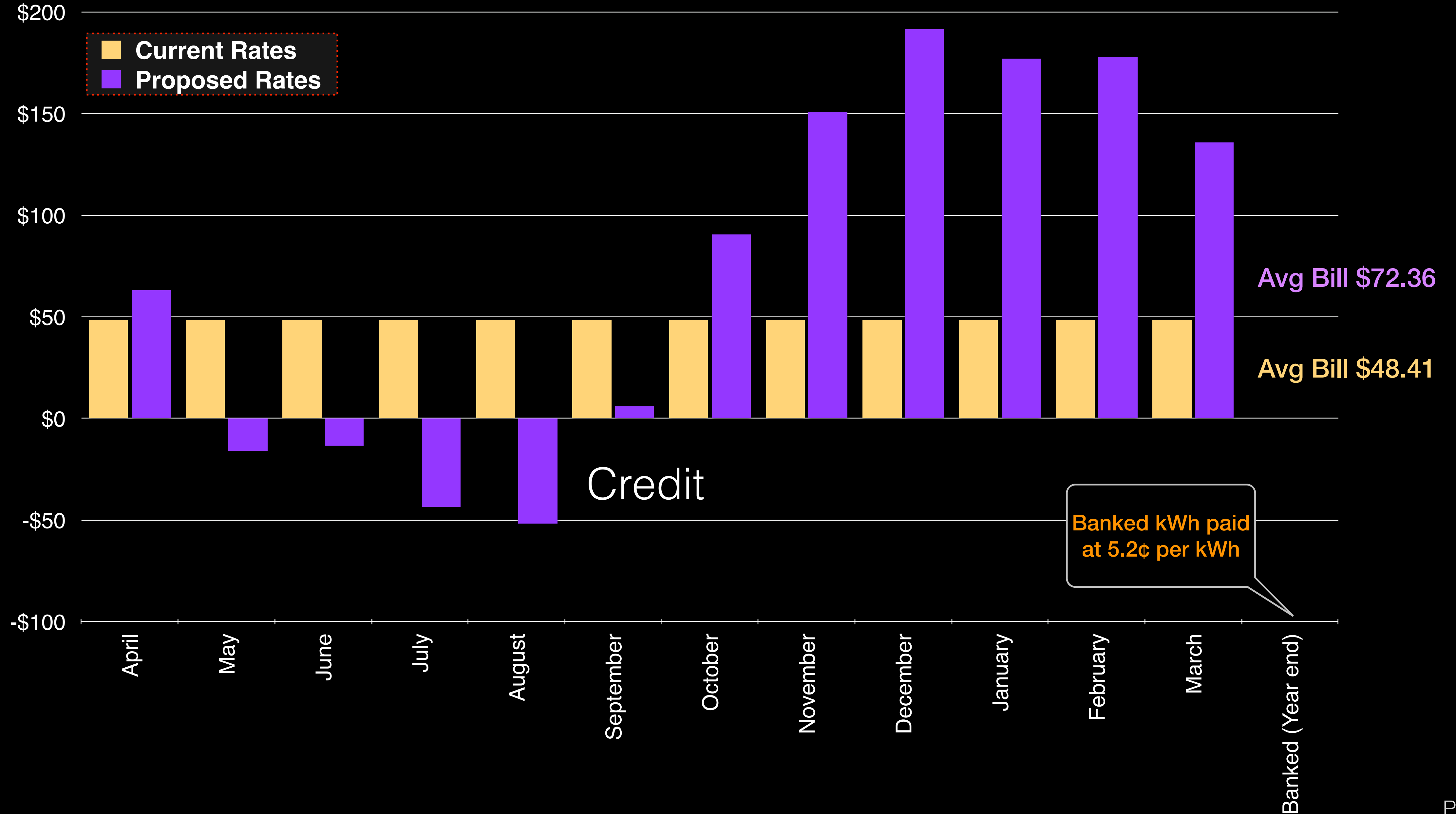
Production kWh Rate (power out)

+ 4.7049¢ Purchased Power Out Credit
- 1.0297¢ Grid Access Out Cost
+ 4.8200¢ Grid Access Out Credit
= 8.4952¢ Credit per kWh

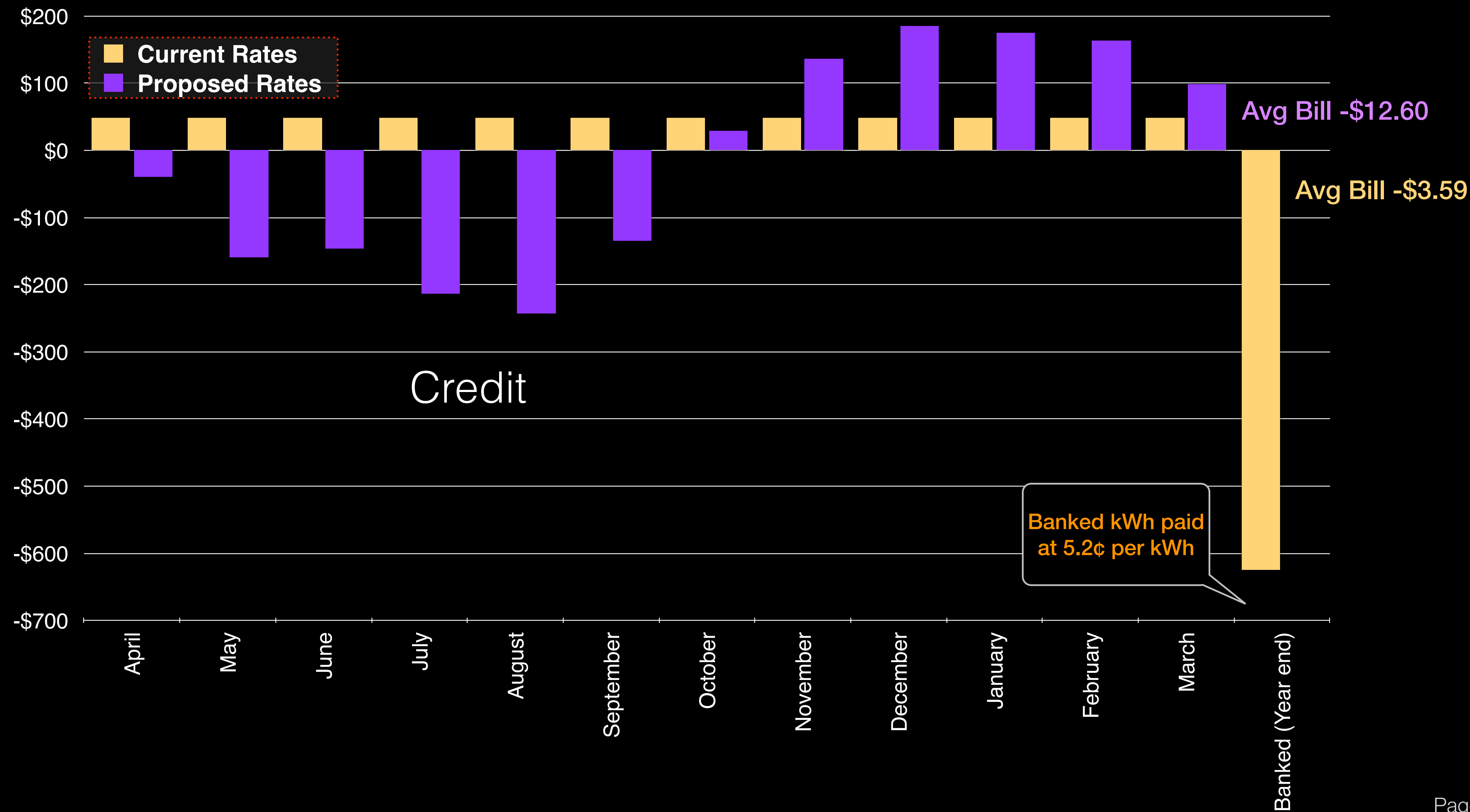
Avg MG ➡

Load (kWh/yr)	Generation (kWh/yr)	Current Non-MG Bill	Proposed Non-MG Bill	Current Member Generator Bill	Proposed Member Generator Bill	MG Bill Variance	\$/kWh Load
14,534	4,918	\$180.31	\$180.31	\$135.68	\$145.49	\$9.81	\$0.010
2,321	2,040	\$69.47	\$69.47	\$50.96	\$55.03	\$4.07	\$0.285
12,000	12,000	\$157.31	\$157.31	\$48.41	\$72.36	\$23.95	\$0.073
29,280	2,143	\$314.42	\$314.42	\$294.68	\$299.25	\$4.57	\$0.123
28,060	14,993	\$303.18	\$303.18	\$166.99	\$197.04	\$30.05	\$0.085
2,437	14,944	\$70.53	\$70.53	-\$6.00	-\$35.62	-\$29.62	-\$0.028

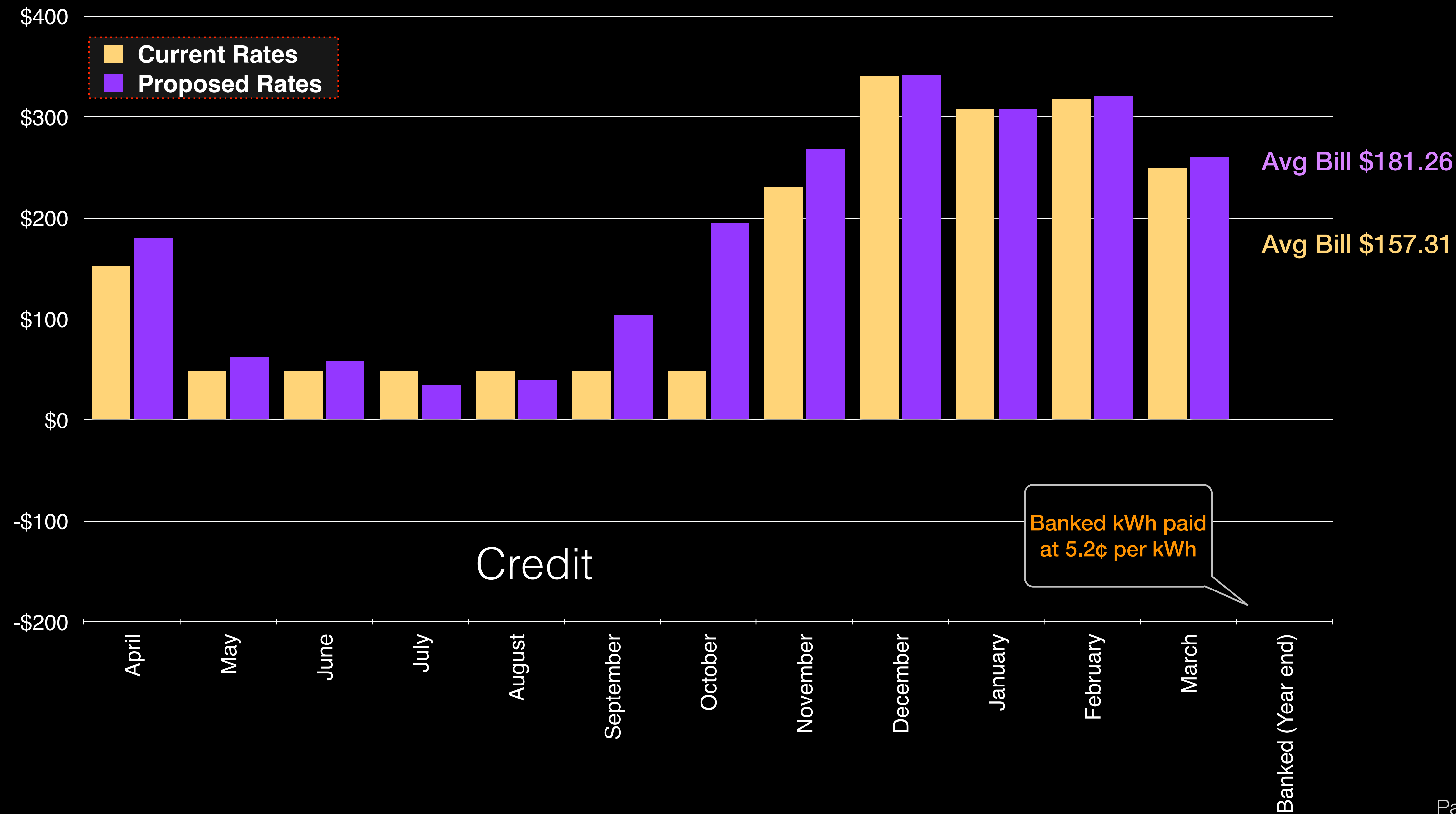
OPALCO MG Typical Monthly Billing: Avg 1,000 kWh Net-Zero MG



OPALCO MG Typical Monthly Billing: Avg 1,000 kWh Load, 2,000 kWh Gen



OPALCO MG Typical Monthly Billing: Avg 2,000 kWh Load, 1,000 kWh Gen



Discussion

Thank You!