



San Francisco
Water
Power
Sewer

Services of the San Francisco Public Utilities Commission

Public Safety Committee Hearing Affordable Access to the Power Distribution Grid

June 13, 2018

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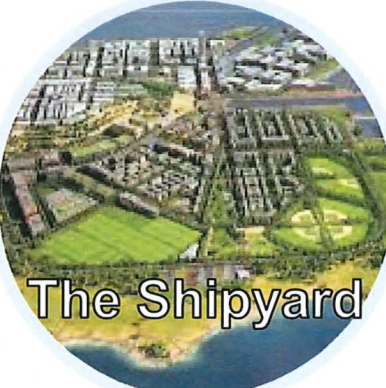
Agenda

1. Background on Hetch Hetchy Power
2. History of Overcoming Challenges
3. Benefits of Hetch Hetchy Power and Lost Opportunities
4. Examples and Impacts of Roadblocks to Affordable Grid Access



Hetch Hetchy Power Has Powered San Francisco for 100 Years

SFPUC provides 100% greenhouse gas-free power to City facilities and some new green communities



How Hetch Hetchy Power Works



The City pays PG&E about \$10 million per year to deliver Hetch Hetchy Power to over 2,500 metered and over 9,000 unmetered electric service points.



Power Business Plan: Six Priority Strategies

PROTECT OUR BASE	Contain Costs	1. Distribution: Ensure affordable access to PG&E's distribution grid for SF residents and businesses
	Increase Revenue	2. Customers: Grow sale to maximize Hetch Hetchy value for San Francisco
STRENGTHEN OUR POSITION	Contain Costs	3. Supply: Pace spending with customer growth
		4. Transmission: Streamline spending
	Operational Excellence	5. Distribution: Invest strategically to reduce costs and ensure customer stability
		6. Cross Functional: Invest to ensure commercial speed and high levels of service for SF residents and businesses



Long History of the City Working to Overcome Challenges

1910

1913: The Raker Act requires San Francisco to produce and distribute hydropower.

1920

1925-1945: PG&E refuses to deliver Hetch Hetchy Power to City customers. City agrees to sell the power to PG&E while working to find alternatives.

1930

1940: U.S. Supreme Court rules City can't sell Hetch Hetchy Power to PG&E.

1940

1945: PG&E finally agrees to deliver Hetch Hetchy Power to certain City customers, establishing first Interconnection Agreement.

1950

1960

1945-2015: City uses an Interconnection Agreement to deliver power, always subject to limits PG&E imposed on which customers the City could serve.

1970

1980

1990

1990s: Federal and State laws change to require open, fair access to private utilities' transmission and distribution.

2000

2010

2015: Interconnection Agreement expires; City switches to open access service. PG&E refuses to serve long-term City customers. PG&E's arbitrary technical requirements create delays and increase costs.

2020



Benefits to the City and Lost Opportunity

IN THE PAST YEAR, HETCH HETCHY POWER HAS **SAVED** THE CITY

\$40 MILLION
in energy costs

387 MILLION POUNDS
of carbon dioxide emissions

the equivalent of **37,589** passenger
vehicles driven for one year



BUT PROJECTS NOT SERVED BY THE SFPUC DUE TO DIFFICULTIES
WITH PG&E HAVE **COST** THE CITY

\$6 MILLION
in forfeited City revenue

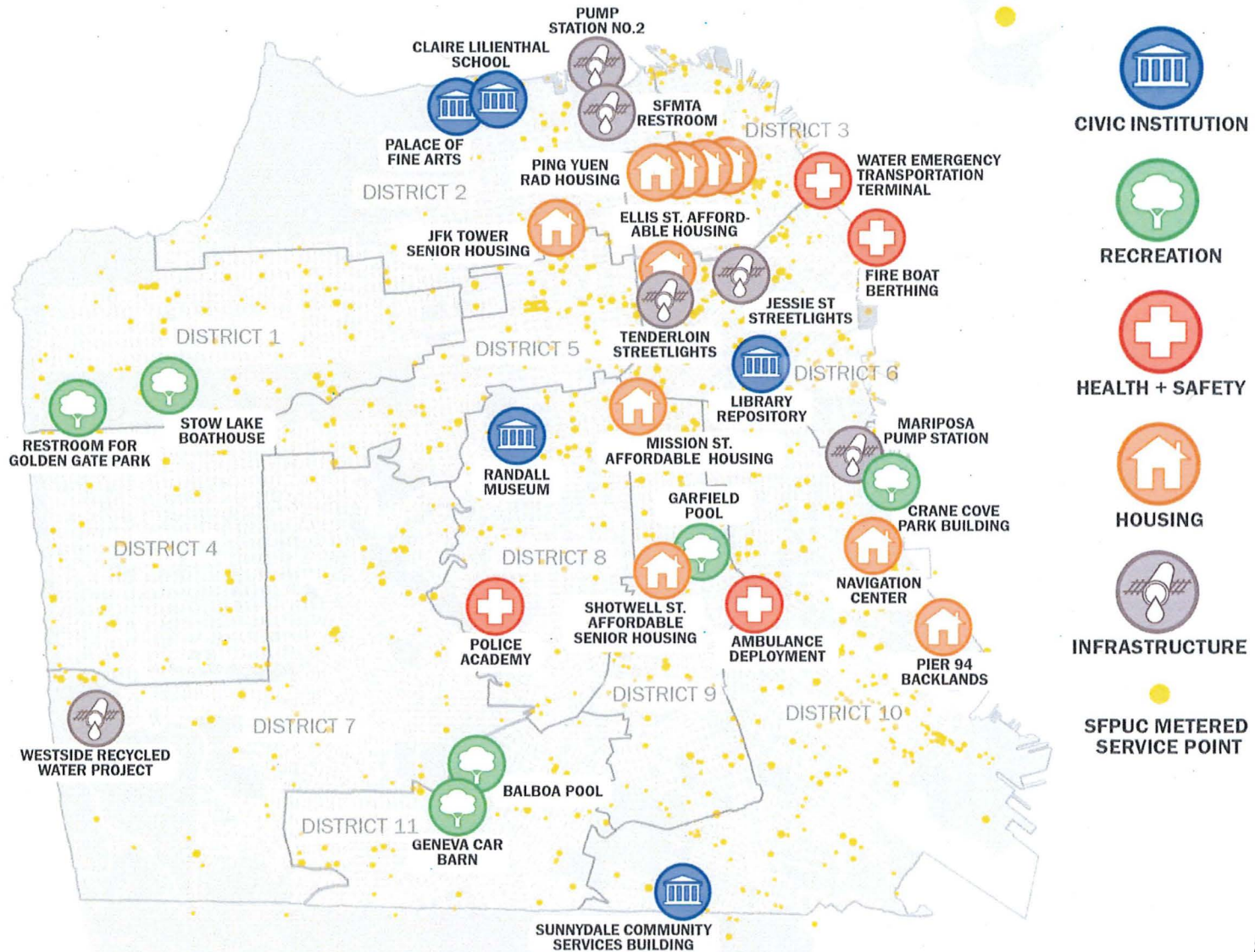
20 MILLION POUNDS
of carbon dioxide emissions

the equivalent of **1,943** passenger
vehicles driven for one year



When SF is able to use Hetch Hetchy power, it saves the City money
and reduces its greenhouse gas emissions.

Projects Hitting Roadblocks to Affordable Grid Access

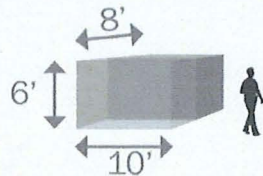


Roadblocks Unnecessarily Increase Costs

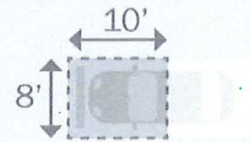
SECONDARY SERVICE (LOW VOLTAGE)



ELECTRICAL EQUIPMENT REQUIRED:



80 SQUARE FEET
\$100,000



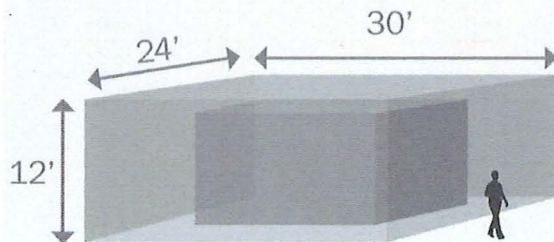
(half the size of a parking space)

MORE APPROPRIATE FOR MOST ELECTRICAL LOADS.

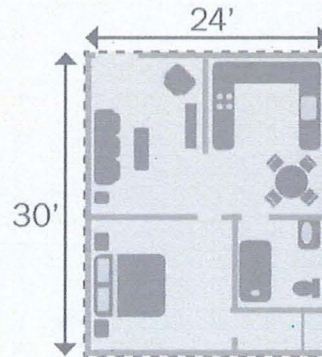
PRIMARY SERVICE (HIGH VOLTAGE)



ELECTRICAL EQUIPMENT REQUIRED:



720 SQUARE FEET
\$600,000

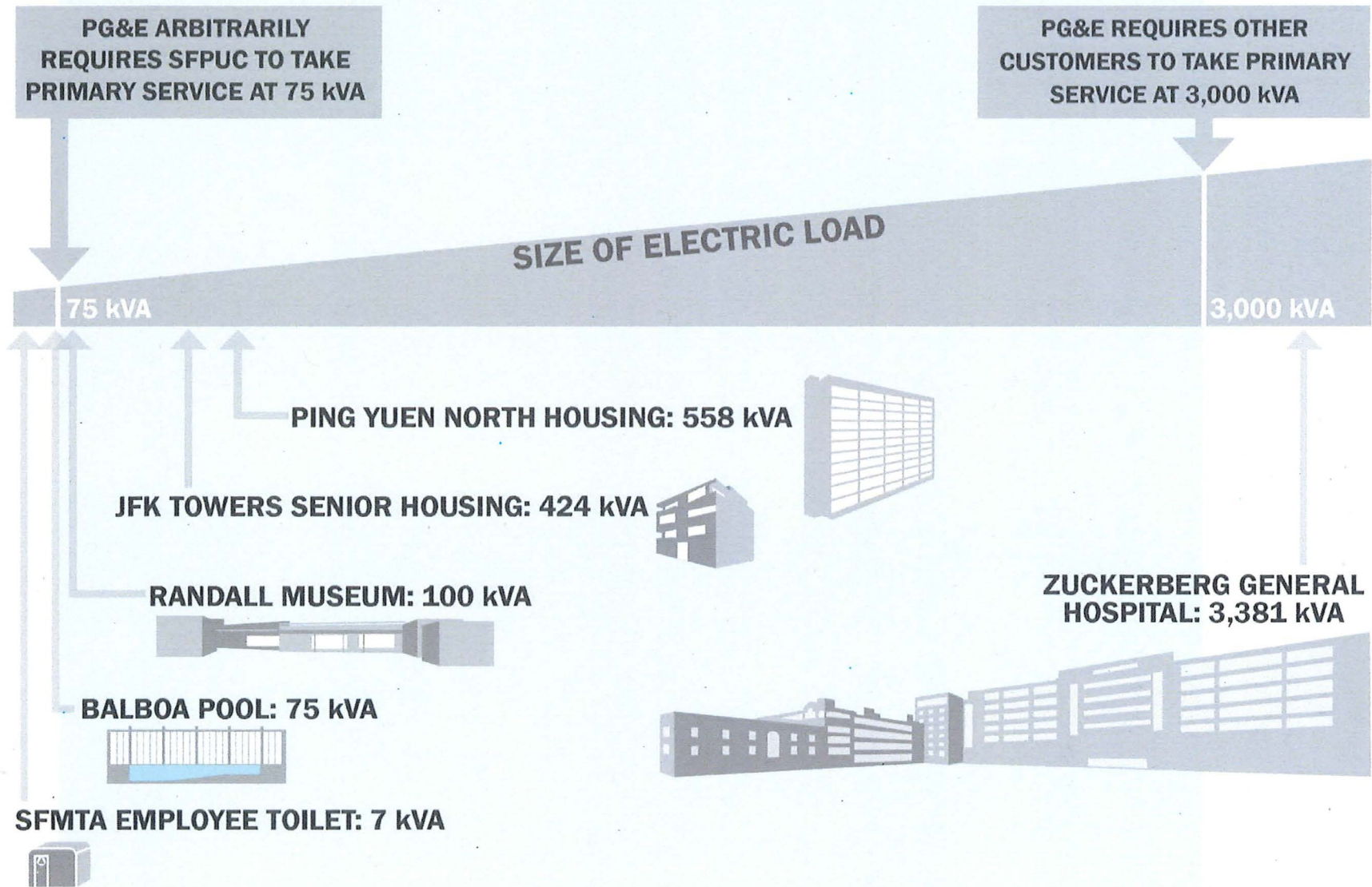


(the size of a one bedroom apartment)

USEFUL FOR VERY LARGE ELECTRICAL LOADS.

- Not needed for:**
- Meeting legal requirements
 - Safety
 - Reliability

PG&E's Arbitrary Requirements





Examples and Impacts of Roadblocks to Affordable Grid Access

Project	Roadblock Delay	Potential Loss of Public Benefit
SFMTA Employee Toilet (7 kVA)	4 months	Loss of public space
Balboa Pool (75 kVA)	Over 1 year and counting	Loss of recreation space
Randall Museum (100 kVA)	Over 1 year	Loss of recreation and parking space
JFK Towers Senior Housing (424 kVA)	6 months and counting	Loss of residential units
Ping Yuen North Housing (558 kVA)	Over 1.5 years and counting	Loss of improved community room

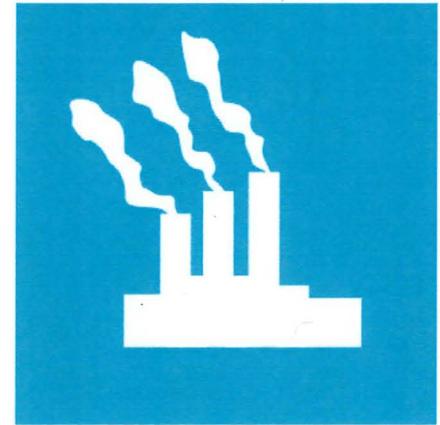
Impacts to San Francisco



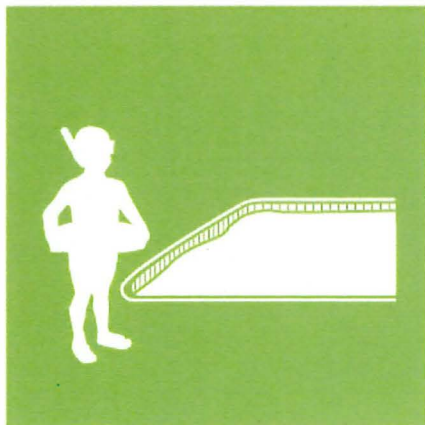
**Loss of City Revenue
and Reinvestment**



**Wasted City Funds
on Staff Time to
Remove Roadblocks**



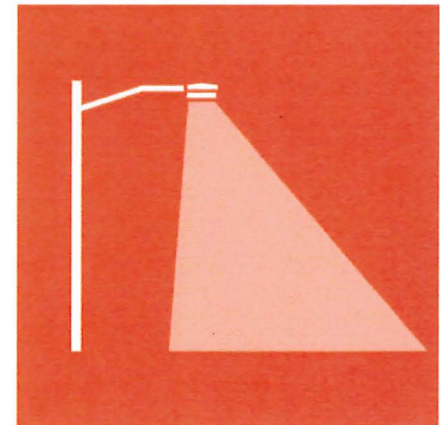
**Greenhouse Gas
Emissions**



**Recreation
Opportunities**



Affordable Housing



Safety and Health



San Francisco
Water
Power
Sewer

Hetch Hetchy Power: Critical to Reaching Our Goals and Living Our Values





THANK YOU

**HETCH HETCHY WATER & POWER
SAN FRANCISCO**