RATE FAIRNESS BOARD MEETING
AGENDA

1. Project Schedule
2. Customer Distribution
3. Hetch Hetchy Rate Design – Tiers
4. Rate Design – Customer Charge
5. CleanPowerSF – Proposed Rates

4. Hetch Hetchy – Rate Transition Plan
POWER RATE STUDY TIMELINE

- **2020**
  - Jan
  - Mar
  - Apr
  - May
  - June
  - July
  - Aug
  - Sept
  - Oct
  - Nov
  - Dec

- **2021**
  - Jan
  - Feb
  - Mar
  - Apr
  - May
  - June
  - July
  - Aug
  - Sept
  - Oct
  - Nov
  - Dec

- **2022**
  - Jan
  - Feb
  - Mar
  - Apr
  - May
  - June
  - July
  - Aug
  - Sept
  - Oct

- **Identify Rates & Fees**
- **Customer Profiles**
- **Revenue Requirement**
- **Cost of Service Analysis**
- **Develop Power Rates and Charges**
- **Outreach Phase 1**
- **Outreach Phase 2**
- **Rate Adoption**
  - Commission May 10
- **Rate Implementation**
  - July 1
CUSTOMER DISTRIBUTION
HETCH HETCHY POWER RATE CLASS

<table>
<thead>
<tr>
<th>Annual Usage (MWh)</th>
<th>Customer Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Retail</td>
</tr>
<tr>
<td>120,121 (12%)</td>
<td></td>
</tr>
<tr>
<td>545,121 (54%)</td>
<td></td>
</tr>
<tr>
<td>340,037 (34%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,090 (16%)</td>
</tr>
</tbody>
</table>
CUSTOMER DISTRIBUTION
HETCH HETCHY POWER CUSTOMER CLASS

Annual Usage (MWh)  Number of Customers

Residential  Small Commercial  Medium Commercial  Large Commercial  Industrial  Airport

316,761 (32%)  346,548 (34%)  105,972 (11%)  145,638 (14%)  62,529 (6%)  27,833 (3%)  46 (1%)  328 (5%)  2,134 (32%)  4,196 (62%)  1 (0%)  43 (1%)
CUSTOMER DISTRIBUTION CLEANPOWERSF

<table>
<thead>
<tr>
<th>Annual Energy (MWh)</th>
<th>Number of Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential</strong></td>
<td><strong>Medium Commercial</strong></td>
</tr>
<tr>
<td>1,301,964 (42%)</td>
<td>305 (0%)</td>
</tr>
<tr>
<td><strong>Small Commercial</strong></td>
<td><strong>Large Commercial</strong></td>
</tr>
<tr>
<td>62,529 (14%)</td>
<td>2,134 (7%)</td>
</tr>
<tr>
<td><strong>Medium Commercial High</strong></td>
<td><strong>Outdoor Lighting</strong></td>
</tr>
<tr>
<td>379,090 (12%)</td>
<td>2,459 (1%)</td>
</tr>
<tr>
<td><strong>Large Commercial</strong></td>
<td></td>
</tr>
<tr>
<td>709,060 (23%)</td>
<td></td>
</tr>
<tr>
<td><strong>Outdoor Lighting</strong></td>
<td></td>
</tr>
<tr>
<td>1,617 (0%)</td>
<td></td>
</tr>
</tbody>
</table>

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HETCHY POWER RATES
RESIDENTIAL TIERED RATES

• Current Retail and Enterprise Hetchy Residential Rates
  – Three tiers based on Energy (kWh)
  – Tier breaks/size varies in Summer vs. Winter
  – Energy rate same for Summer and Winter

• Issues:
  – Tier 2 very small, most customers shoot right through it
  – New all-electric buildings have higher energy usage than gas and electric, and always hit Tier 3

• Methodology for New Tiers
  – Distribution analysis of 2019 actual usage by season for gas & electric rate
  – Applied PG&E “baseline” ratio to develop tiers for new all-electric rate

• Recommendation:
  – Tier 1 is “below average” user, Tier 2 is “above average” user, Tier 3 is “very high” user
  – Rates will be set by COS analysis
HETCHY POWER RATES
RESIDENTIAL TIERED RATES : GAS & ELECTRIC TIERS ANALYSIS

Monthly Customer Count by Usage - Summer

- Tier 1: 61% of Bills, 46% of kWh
- Tier 2: 33% of Bills, 32% of kWh
- Tier 3: 6% of Bills, 22% of kWh

Average Excluding >1000 Outliers = 227 kWh
2x Standard Deviation Excluding >1000 Outliers = 524 kWh

Monthly Customer Count by Usage - Winter

- Tier 1: 61% of Bills, 49% of kWh
- Tier 2: 33% of Bills, 35% of kWh
- Tier 3: 6% of Bills, 16% of kWh

Average Excluding >1000 Outliers = 252 kWh
2x Standard Deviation Excluding >1000 Outliers = 579 kWh
HETCHY POWER RATES
RESIDENTIAL TIERED RATES: ALL-ELECTRIC TIER BREAKS

- Small sample size of Hetchy customer data for all-electric heating, so can’t use our data
- Instead, modelled ratio between gas & electric vs. all-electric for PG&E Zone T (SF) baseline
- Applied to Electric vs Gas Heating for both Summer and Winter
- Held relationship constant for Tier 3

<table>
<thead>
<tr>
<th>PG&amp;E E-1 Tiers (kWh/Month) Zone T (SF)</th>
<th>Gas &amp; Electric</th>
<th>All-Electric Heating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>0-206</td>
<td>0-250</td>
</tr>
<tr>
<td></td>
<td>0-228</td>
<td>0-414</td>
</tr>
<tr>
<td>101-400%</td>
<td>207-829</td>
<td>250-999</td>
</tr>
<tr>
<td></td>
<td>229-914</td>
<td>415-1,658</td>
</tr>
<tr>
<td>(110% summer gas &amp; electric)</td>
<td>(166% winter gas &amp; electric)</td>
<td></td>
</tr>
<tr>
<td>Over 400%</td>
<td>830+</td>
<td>1,000+</td>
</tr>
<tr>
<td></td>
<td>915+</td>
<td>1,659+</td>
</tr>
</tbody>
</table>
### HETCHY POWER RATES

**RESIDENTIAL TIERED RATES: PROPOSED TIER BREAKS**

<table>
<thead>
<tr>
<th>Current R-1 Tiers (Monthly kWh)</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tier 1</strong></td>
<td>0-277</td>
<td>0-228</td>
</tr>
<tr>
<td><strong>Tier 2</strong></td>
<td>0-278</td>
<td>229-296</td>
</tr>
<tr>
<td><strong>Tier 3</strong></td>
<td>0-252</td>
<td>0-277</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposed Tiers - Gas and Electric (Monthly kWh)</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tier 1</strong></td>
<td>0-252</td>
<td>0-226</td>
</tr>
<tr>
<td><strong>Tier 2</strong></td>
<td>0-278</td>
<td>227-523</td>
</tr>
<tr>
<td><strong>Tier 3</strong></td>
<td>0-277</td>
<td>0-252</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposed Tiers – All-Electric Heating (Monthly kWh)</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tier 1</strong></td>
<td>0-417</td>
<td>0-249</td>
</tr>
<tr>
<td><strong>Tier 2</strong></td>
<td>418-959</td>
<td>250-577</td>
</tr>
<tr>
<td><strong>Tier 3</strong></td>
<td>960+</td>
<td>578+</td>
</tr>
</tbody>
</table>

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HETCHY POWER RATES
RESIDENTIAL TIERED RATES: PROPOSED TIER RATES

<table>
<thead>
<tr>
<th>Tier</th>
<th>Rate ($/kWh)</th>
<th>Current</th>
<th>Proposed</th>
<th>PG&amp;E E-1 Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>$0.1778</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Tier 2</td>
<td>$0.2021</td>
<td>114%</td>
<td>120%</td>
<td>125%</td>
</tr>
<tr>
<td>Tier 3</td>
<td>$0.4137</td>
<td>233%</td>
<td>180%</td>
<td>157%</td>
</tr>
</tbody>
</table>

Note that PG&E’s E-1 rate has a much higher kWh cutoff for Tier 3, so not exactly comparable

• Current tiers place significant cost recovery in Tier 3, relying on high usage to cover our costs
• Proposed tiers have lower differences
  o Environment: maintains cost increase for highest usage
  o Financial stability: Does not rely on high usage to meet revenue targets
  o Equity: Research suggests lower usage primarily by higher income households with modernized homes and energy efficient appliances
CLEANPOWERSF AND HETCHY POWER RATES
MONTHLY CUSTOMER SERVICE CHARGES

• Cost of Service (COS) allocated to Customer Costs:
  – Hetchy: Customer Service, Customer Accounting, Customer Programs (Non-Municipal)
  – CleanPowerSF: Data Mgmt & Service Fees, Customer Accounting, Energy Programs, Bad Debt

• COS could justify high potential charge (residential example)
  – Hetchy: $156.77/month
  – CleanPowerSF: $4.68/month

• Recommendation
  – Hetchy: continue with customer charge
    • Implement phased increase to for each customer class to cost of service, but cap for residential where COS charges would be very high
    • Commercial classes use same methodology, would have higher customer charges than residential (and are already closer to COS)
  – CleanPowerSF: stand by for ongoing CPUC regulatory process for NEM customers; consider/plan for down the road
**CLEANPOWERSF PROPOSED RATES METHODOLOGY**

- COS rate lower than comparable PG&E current effective (March) rates
  - CleanPowerSF Gen Rate + PCIA & FFS = comparable PG&E Gen Rate
- Proposal: decrease rates in Year 1 and Year 2
  - Set year 1 rates to 50% between current rates and cost of service rates in Year 2
- Goal: meet policy reserve to build to 180 days cash on hand in Year 3, on right path to build to 150 days cash on hand in Year 2
## CleanPowerSF DRAFT RATES

<table>
<thead>
<tr>
<th>FYE 2023</th>
<th>Residential</th>
<th>Sm Comm</th>
<th>Med Comm (Low)</th>
<th>Med Comm (High)</th>
<th>Large Comm</th>
</tr>
</thead>
<tbody>
<tr>
<td>CleanPowerSF Gen Rate</td>
<td>$0.1191</td>
<td>$0.1102</td>
<td>$0.1122</td>
<td>$0.1048</td>
<td>$0.0984</td>
</tr>
<tr>
<td>% Rate Change</td>
<td>-8%</td>
<td>-11%</td>
<td>-15%</td>
<td>-11%</td>
<td>-12%</td>
</tr>
<tr>
<td>Average Bill Impact</td>
<td>-$3</td>
<td>-$18</td>
<td>-$236</td>
<td>-$397</td>
<td>-$5,116</td>
</tr>
<tr>
<td>Average Total Bill</td>
<td>$96</td>
<td>$403</td>
<td>$3,866</td>
<td>$9,695</td>
<td>$83,220</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FYE 2024</th>
<th>Residential</th>
<th>Sm Comm</th>
<th>Med Comm (Low)</th>
<th>Med Comm (High)</th>
<th>Large Comm</th>
</tr>
</thead>
<tbody>
<tr>
<td>CleanPowerSF Gen Rate</td>
<td>$0.1090</td>
<td>$0.0960</td>
<td>$0.0925</td>
<td>$0.0925</td>
<td>$0.0842</td>
</tr>
<tr>
<td>% Rate Change</td>
<td>-8%</td>
<td>-13%</td>
<td>-18%</td>
<td>-12%</td>
<td>-14%</td>
</tr>
<tr>
<td>Average Bill Impact</td>
<td>-$3</td>
<td>-$18</td>
<td>-$237</td>
<td>-$412</td>
<td>-$5,163</td>
</tr>
<tr>
<td>Average Total Bill</td>
<td>$97</td>
<td>$401</td>
<td>$3,794</td>
<td>$9,707</td>
<td>$82,734</td>
</tr>
</tbody>
</table>

*Draft numbers subject to change*
Draft numbers subject to change. PG&E and PCIA delivery charges are a forecast and may be different than shown.
CLEANPOWERSF: SUPERGREEN PREMIUM

• Evaluated cost to serve SuperGreen customers, and determined existing premiums meet cost of service

• Proposal: keep current premiums, standardizing commercial
  – Residential: $0.01/kWh
  – Commercial: $0.005/kWh

• Maintains affordable option for 100% renewable energy

<table>
<thead>
<tr>
<th>SuperGreen Premium ($/kWh)</th>
<th>Residential</th>
<th>Sm Comm (Low)</th>
<th>Med Comm (Low)</th>
<th>Med Comm (High)</th>
<th>Large Comm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>$0.01</td>
<td>$0.0075</td>
<td>$0.005</td>
<td>$0.005</td>
<td>$0.0075</td>
</tr>
<tr>
<td>Proposed</td>
<td>$0.01</td>
<td>$0.005</td>
<td>$0.005</td>
<td>$0.005</td>
<td>$0.005</td>
</tr>
</tbody>
</table>
HETCH HETCHY POWER: COST OF SERVICE PHASED TRANSITION

• Hetch Hetchy’s “messy” existing rates require a period of phase-in we transition to cost of service for all customers
• Various parts of the Hetchy rate design create a short-term subsidy that must be recovered from other customers to ensure we collect the full revenue requirement
  – Limiting retail residential customers rate increase to max 10% (COS requires a higher increase)
  – Phasing out subsidized rates for GUSE customers over time
  – Continuing current low-income discounts for residential customers
• Prioritizing program financial sustainability, recovery of cost of service
• Evaluating plan of recovery, taking into account of change impact on customer classes – proposal to spread among all other customers, smooth change over two years
NEXT STEPS

• Final areas to cover
  – Magnitude of annual Hetch Hetchy rate change by customer and rate class
  – Potential changes to seasonal and time-of-use pricing
  – Example bill impacts for CleanPowerSF and Hetch Hetchy customers

• Need to schedule another RFB meeting, discuss dates