NRDC Successor Tariff Proposal

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California's Clean Energy Policy

- SB100 and Executive Order B-55-18 set goals for "zero carbon" electric retail sales and carbon neutral economy by 2045

- We know where to go, but how do we get there?
  - Cost-effectively
  - Equitably
  - Environmentally conscious

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And where does net energy metering fit in?

- Net energy metering has so far driven adoption of rooftop solar in California; 9 GW and counting.

- What should net energy metering rules be to align with our broader CA clean energy goals?
  - Hint: NRDC's Successor Tariff Proposal

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NRDC Successor Tariff Overview

- Neutral tariff: benefits of NEM equals costs for all customers
  - Net billing
  - Export at avoided costs
  - Time of Use Consumption Charges
  - Appropriate and Scalable Grid Benefit (fixed) Charges
  - Non-Bypassable Charges

- Market Transition Credit: allow a ten-year payback

- Equity in Clean Energy Fund: guarantee benefits to lower income customers

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Net ~~Metering~~ Billing

Net bill = Grid Benefit Charge + Consumption – Export + [Other Charges]

- No changes proposed to how credits rollover; open to stakeholder ideas

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Time Of Use (TOU) Consumption Charges

- NEM 3.0 customers should be on TOU charges that provide incentives to consume and save energy in alignment with grid needs and climate goals.
  - Voluntary for CARE customers

- Support Sierra Club proposal to move NEM 1.0 customers to a TOU rate if possible

- Savings will occur to the extent NEM 1.0 customers change their behavior after transition to TOU

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Solar Exports at Avoided Costs

- Set value at near-term (~3 years) avoided costs for stability
  - Same export value for all customers – CARE and non-CARE
- Update export rate regularly; e.g., every two years
  - If additional benefits get added to avoided costs, like air quality, they get accounted for
- New NEM 3.0 customers locked-in to whatever current export rate is for ten years
  - Move to relevant export rate at end of ten years for another ten or TBD period

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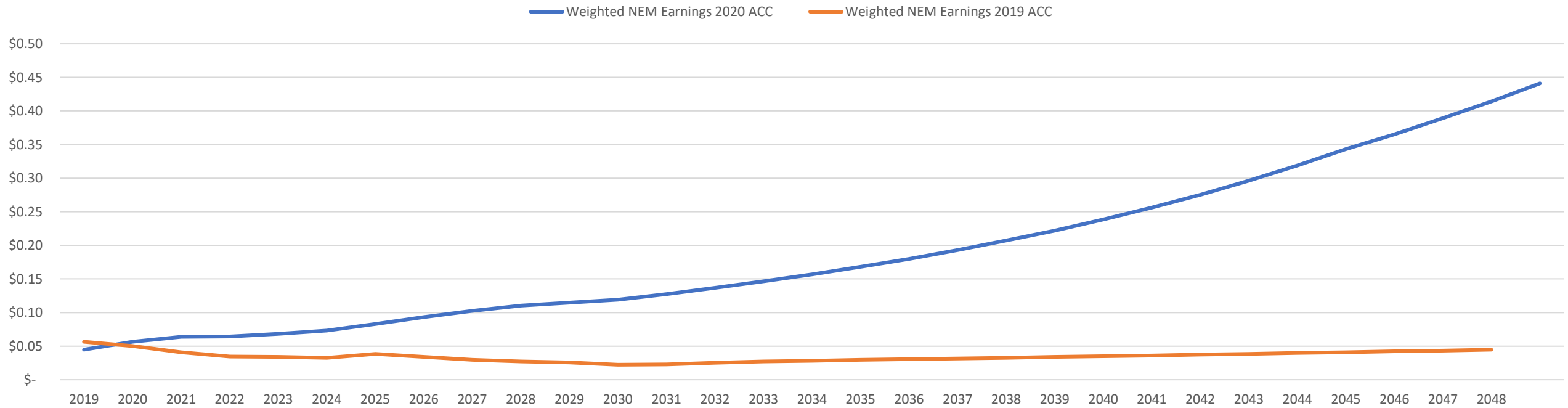
Avoided Costs in Out-Years Can Get Uncertain



- Illustrative example; PG&E CZ 3
  - 2018 avoided cost values similar to 2019
- 2021 avoided costs?
  - Coming soon to your inbox!

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Upfront Incentive: Market Transition Credit

- One time adoption incentive; allow payback of ~10 years
  - Existing NEM subsidy lasts as long as rooftop systems last (25- 30 years or more)
  - Existing NEM subsidy increases every year as rates increase

- Update every two years to be up to date with other tariff components, decreasing solar system prices

- Transparent subsidy
  - How much should we value the benefits of rooftop solar in addition to energy system and carbon benefits?

- Opens the door to other sources of funding in the future
  - Needed: someone with gumption and a talent for developing legislation!

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Upfront Incentive: Market Transition Credit (contd.)

- Combined with locked-in export rate, customer all but guaranteed to make back their investment in a reasonable time.
  - Stable market signal!
- Keeps distributed generation growing sustainably.
  - Low-income programs and building codes also increase distributed generation in CA
- Allows flexible policy decisions
  - Incentive can be adjusted in good time to better help meet changing state policy goals
- Decreases rate impact on non-solar adopters
  - If co-funded from outside electric sector, it eliminates it

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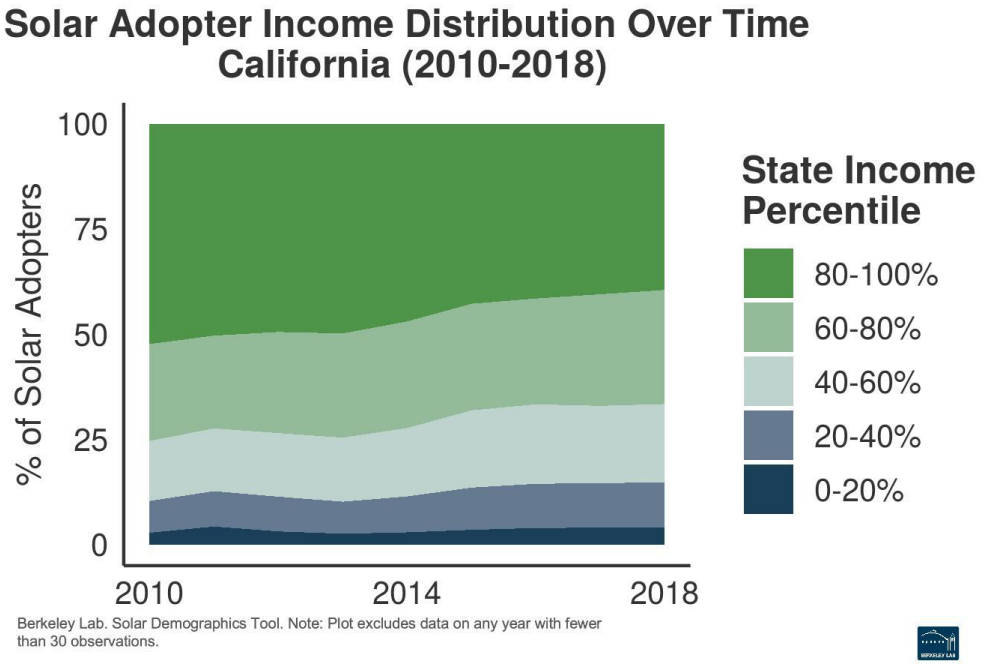
Grid Benefit Charge and Non-Bypassable Charge

- Grid benefit charge: scalable fixed charge that accounts for benefit NEM customer gets from being connected to the grid
  - Resilience and reliability for NEM customer

- Non-Bypassable Charges: Based on total estimated consumption

Equity in Clean Energy Fund

- Rooftop solar is disproportionately installed on higher earners' homes
- Single biggest barrier for LMI adoption: first costs of installation and repair
- CARE customers have incurred more costs than benefits from NEM historically



Equity in Clean Energy Fund (2)

- NEM 1.0 and 2.0 customers pay $2.50/ kW
- NEM 3.0 customers only pay after 10 years/ payback
- Collect ~$130 - $150 million annually
- Need new CPUC process to appropriate these funds
- Involve community members and environmental justice advocates to understand needs and spend funds accordingly
  - Many possibilities: solar, electrification, disconnections, etc.

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NEM 1.0 and 2.0 Customer Transition

- NRDC supports further discussion

- NRDC supports Public Advocates' Proposal to provide incentives for storage for faster transition to NEM 3.0

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Evaluating Party Proposals

- NRDC rigorously reviewed TURN's tool and supports its application.

Successor Tariff Development will Require Stakeholder Creativity and Coordination

Balancing all CPUC principles is no easy task.

NRDC looks forward to working with stakeholders