

# Distributed Generation Successor Tariff Workshop

## Joint IOU Proposal

Pacific Gas & Electric  
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Southern California Edison

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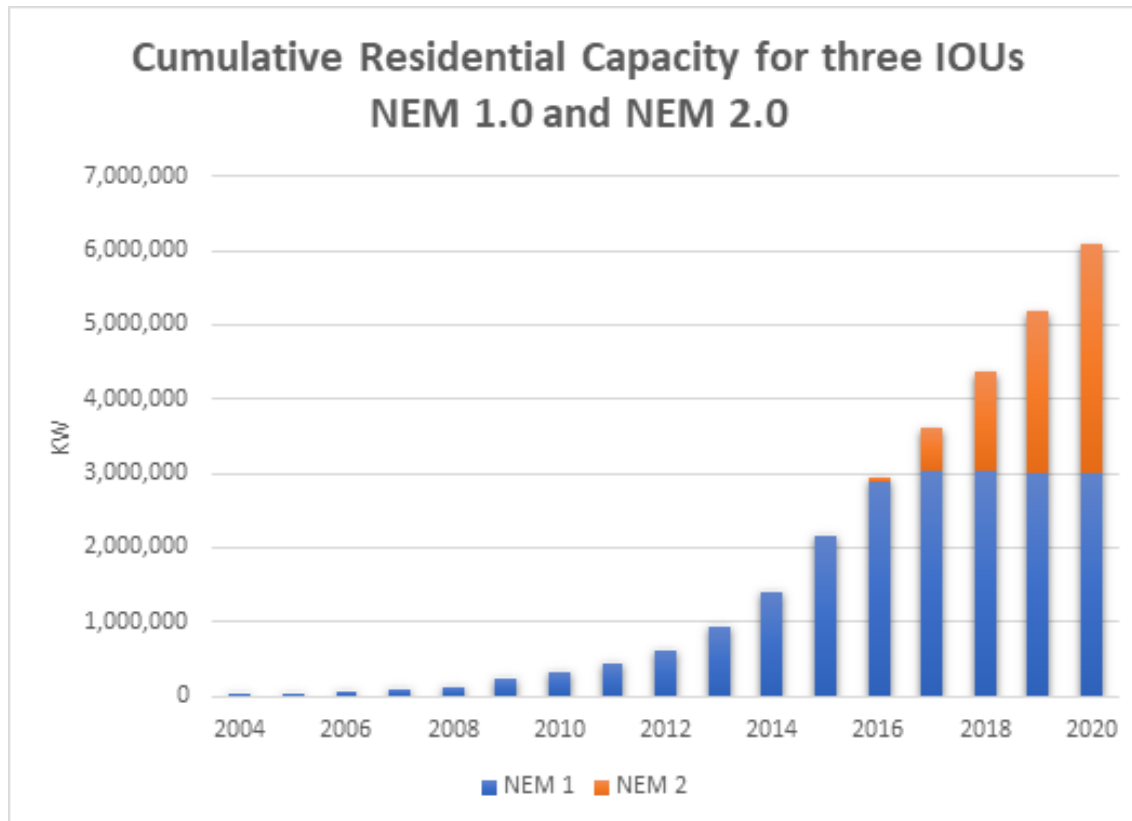


# Agenda

1. Distributed Generation in the PG&E, SCE and SDG&E Territories
2. Core Tariff Proposal
  - Default Rate
  - Export Compensation
  - Grid Benefits Charge
  - Fixed Charge Calculation
  - Non-residential
  - Dual-meter Option (Value of Delivered Energy)
3. Virtual Net Metering
4. Income-qualified Proposal
5. Distributed Generation: Comparison to Other Jurisdictions

# Distributed Generation Adoption

PG&E, SDG&E, and SCE customers have installed significant volumes of distributed generation – primarily rooftop solar – to date. Behind-the-meter renewables are an important part of California's carbon reduction strategy and a vehicle for our customers to make energy choices that best meet their needs.



*PG&E connects about 6,000 rooftop solar customers per month and represents ~15% of rooftop solar capacity nation-wide.*

# Core Proposal: Default Rates

The Joint IOUs' core tariff proposal eliminates the cost shift and creates an incentive for customers to pair storage with their rooftop solar systems. The proposal provides a storage incentive through non-tiered cost based TOU rates and ensures customers pay for costs incurred to serve them through a customer charge.

## Illustrative PG&E Default Rate (E-DER)

Charge	Unit	Rate
Customer	\$/month	\$20.66
Energy Charges:		
Summer		
Peak (4-9 PM)	\$/kWh	\$0.40
Partial-Peak (3-4 PM, 9 PM-12 AM)	\$/kWh	\$0.27
Off-Peak (All Other Hours)	\$/kWh	\$0.22
Winter		
Peak	\$/kWh	\$0.23
Partial-Peak	\$/kWh	\$0.21
Off-Peak	\$/kWh	\$0.20

- Distributed generation customers defaulted onto a cost-based non-tiered TOU rate with a customer charge
- SCE: existing PRIME rate
- PG&E and SDG&E: new rates
- Customers may choose from other available cost-based non-tiered TOU rates (e.g., EV rates, electrification rates)

# Core Proposal: Export Compensation

Export compensation is set based on CPUC-calculated avoided costs and updated annually. This ensures that distributed generation are paid based on the value of the generation to non-participants – the value would go up or down annually based on CPUC-calculated avoided costs.

## Illustrative PG&E Seasonal Export Rate

Summer	\$/kWh	Winter	\$/kWh
Peak (4-9 PM)	\$0.13	Peak	\$0.06
Partial-Peak (3-4 PM, 9 PM – 12 AM)	\$0.08	Partial-Peak	\$0.05
Off-Peak (All Other Hours)	\$0.06	Off-Peak	\$0.05

- Exports set based on avoided cost, with time-of-export periods that match the underlying time-of-use periods
- Calculation Methodology:
  - ACC weighted by recorded export profile
  - Capped at commodity retail rate
  - 1-year levelized value updated annually after the ACC adopted
- Split into commodity and system components to ensure LSE neutrality

# Core Proposal: Grid Benefits Charge

The Grid Benefits Charge applies to the size of the distributed generation system and ensures the customer pays for the cost of using the transmission and distribution grid, as well as costs associated with public policy programs such as energy efficiency and CARE.

## Illustrative Grid Benefit Charge by IOU

IOU	Proposed Grid Benefits Charge w/ Cost Based Rate	Alternate Grid Benefits Charge w/ Tiered TOU Rate
PG&E	\$10.93	\$14.51
SDG&E	\$11.09	\$14.50
SCE	\$7.39	\$13.46

- Monthly charge applied to the size of the system to recover distribution, transmission, and remaining bundled rate components, less relevant avoided costs
  - Includes NBCs based on an estimation methodology
- Single charge for all technologies
  - May revisit assumptions and whether to set standalone charge separate from paired storage charge in a future Rate Design Window or GRC Phase 2
- Updated annually as costs change

# Core Proposal: Fixed Charge Components

The Grid Benefits Charge and Customer Charge each collect different categories of costs. The Grid Benefits Charge collects fixed costs that are ordinarily collected through volumetric rates, which a distributed generation customer would otherwise be able to avoid. The Customer Charge collects costs associated with billing the customer.

## Grid Benefits Charge (\$/kW-month)

### Delivery Rate

- Transmission
- Distribution (Minus customer costs)
- CAM

### Non-bypassable Charges

- Wildfire Fund Charge
- Public Purpose Programs
- Nuclear Decommissioning
- Competition Transition Charge\*

### Bundled Generation

**Less applicable avoided costs**

## Customer Charge (\$/month)

### Marginal Customer Costs

- Billing Costs
- Transformer
- Service Drop
- Meter

*Transmission, distribution, public policy, and customer costs continue regardless of whether a customer installs distributed generation or not. In some cases, these costs are higher for distributed generation customers.*

# Core Proposal: Non-Residential

For non-residential distributed generation customers, the Joint IOUs propose a Grid Benefits Charge to collect costs not already recovered through demand or other fixed charges. For more complex non-residential rate structures, the Grid Benefit Charge will be much smaller than proposed for distributed generation residential customers.

Monthly charge applied to the size of the system to recovery transmission, distribution, and public policy charges not already recovered through the demand or other charges.

## Illustrative PG&E Non-Residential Grid Benefits Charges

Tariff	Grid Benefits Charge (\$/kW-mo)
B1	\$16.34
B6	\$15.57
B10S	\$9.27
B10P	\$8.36
B10T	\$4.52
B19S	\$3.81
B19P	\$3.02
B19T	\$3.19
B20S	\$3.38
B20P	\$3.02
B20T	\$2.10
AG-A1	\$13.57
AG -A2	\$8.95
AG-B	\$12.75
AG-C	\$8.31



# Core Proposal Option: Dual Meter Option (Value of Distributed Energy)

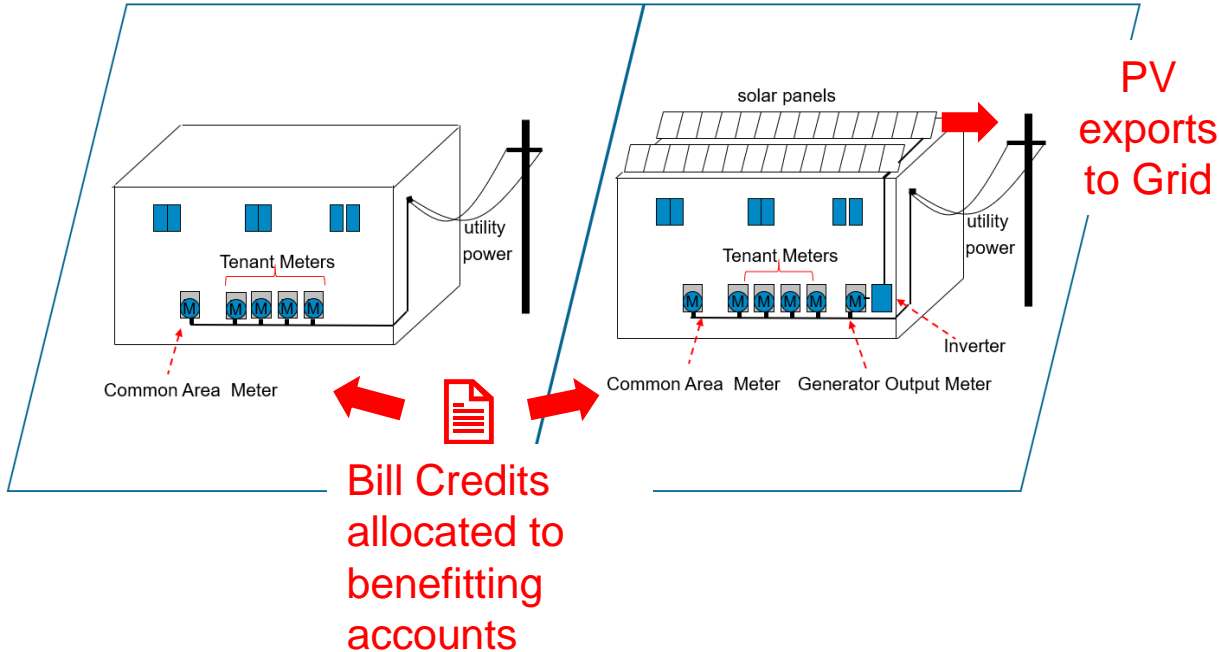
The Joint IOUs' also propose a financially equivalent dual-meter tariff option that could be offered, if needed, to facilitate more modern uses of distributed generation such as a power sharing tariff or demand response participation. Compensation could be scaled to achieve policy goals.

## Illustrative PG&E Value of Distributed Energy Rate

Time-of-Generation Period		Baseline VODE (ACC)	Retail Indifference Adder	Income-Qualified Adder	Total
Summer	Peak	\$0.15	\$0.04	\$0.05	\$0.24
	Part-Peak	\$0.08	\$0.04	\$0.05	\$0.17
	Off-Peak	\$0.06	\$0.04	\$0.05	\$0.15
Winter	Peak	\$0.06	\$0.04	\$0.05	\$0.15
	Part-Peak	\$0.05	\$0.04	\$0.05	\$0.14
	Off-Peak	\$0.05	\$0.04	\$0.05	\$0.14
PV Profile Weighted Average Compensation		\$0.06	\$0.04	\$0.05	\$0.15

# Virtual Net Metering

summary: 10 benefitting accts (2 common area, 8 tenant)



*Generation in Virtual Net Metering systems may be located off-site from the benefitting accounts. For some tariffs, all the generation is exported to the grid as opposed to being consumed onsite.*

## Proposed Changes to Existing VNEM Tariffs:

- Consolidate to two tariffs: one for low-income and one for non-low-income
- Eliminate any "on-site usage" netting and value all exports at avoided costs
- Allocate revenues from exports as dollar credits

# Income Qualified Proposal

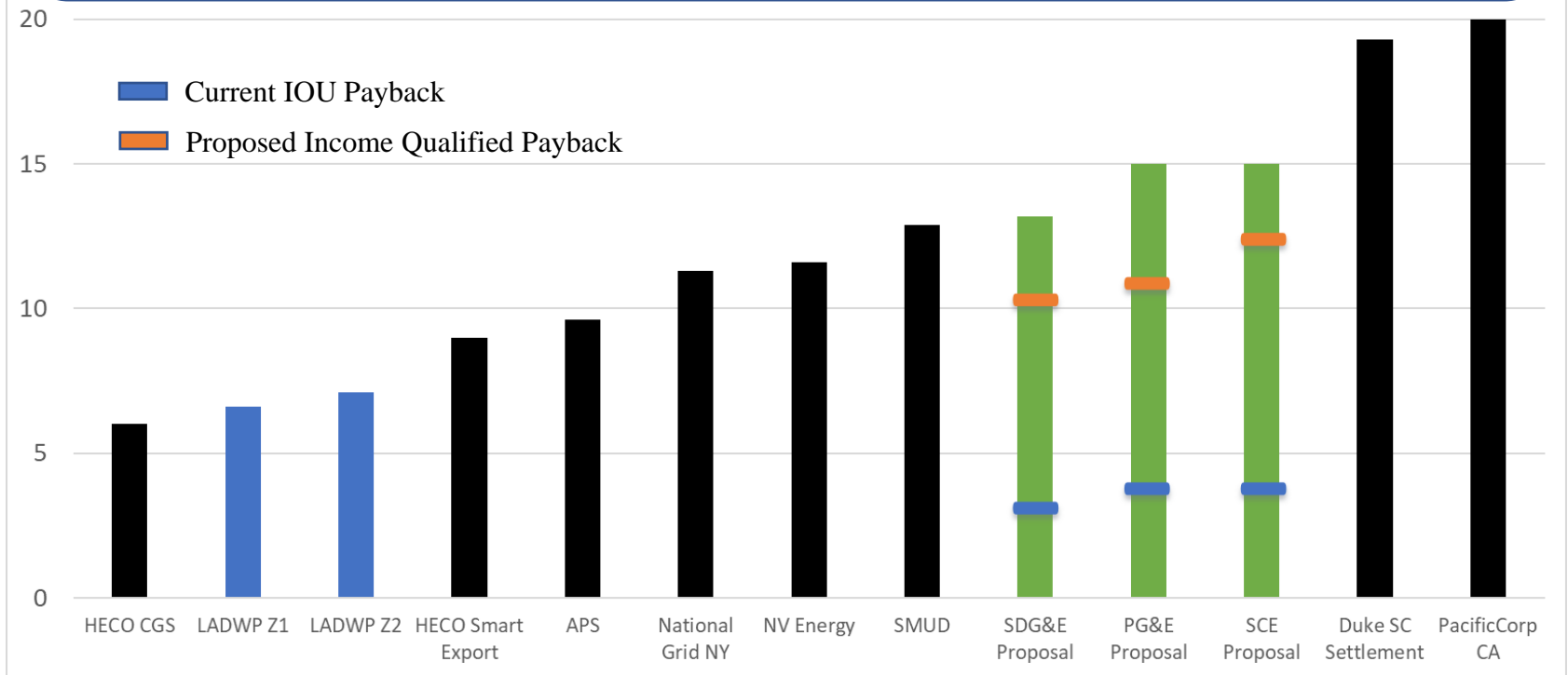
The Joint IOUs' Income-qualified proposal eliminates the "low-income penalty" by: (1) providing a significant discount on the Grid Benefits Charge and (2) ensuring the exports are valued at the same price for CARE/FERA customers as for non-CARE/FERA customers. Under this proposal, Income-qualified customers will see faster payback periods for installing distributed generation than non-income-qualified customers.

## Income-qualified Rider

- **Discount:** Discounted Grid Benefits Charge for income-qualified (CARE/FERA) customers
  - Over 80% discount on the Grid Benefits Charge for PG&E (~\$1.50/kW-month vs to ~\$11.00/kW-month)
- **Export Compensation:** Export compensation the same as for non-CARE/FERA customers
- **Other Eligibilities:** Customers still entitled to underlying CARE/FERA discount and eligible for income-qualified solar access programs (e.g., DAC-SASH)
- **Availability:** Program open for 3 years from implementation of distributed generation successor tariff and applicable for 10-years

# Comparison to Other Jurisdictions

The Joint IOUs' proposal will bring the value proposition for PG&E, SDG&E, and SCE customers considering distributed generation back in line with the value proposition faced in other jurisdictions, including other jurisdictions within California that have reformed their distributed generation tariffs. The proposal will also result in better economics for income-qualified customers than for higher income customers.



■ Non-Reformed

■ Recent Reforms to NEM

■ CA IOU Proposals

# Appendix

# Core Proposal: Netting & True-Up

## Export Compensation Netting Example

Time-of-Use or Time-of-Export Period	Imported kWh	Exported kWh	Compensated at Export Compensation Rate	Net Imports (Exports)	Compensated at Wholesale Rate
Peak (4-9 PM)	100	25	25	75	n/a
Part-Peak (3-4 PM, 9 PM –12 AM)	150	200	150	(50)	50
Off-Peak (All Other Hours)	200	100	100	100	n/a

- Exports compensated at applicable export compensation rate for the time-of-export period, with the quantity of exports compensated at that value limited to consumption during corresponding time-of-use period
- Any remaining credits will be compensated at the monthly Net Surplus Compensation Rate
- Unlikely to impact appropriately sized systems or systems with paired storage

# Proposed Default Rate: SCE PRIME

## 2021 Revenue Requirement

Charge	Unit	Total Rate
Customer Charge	\$/month	\$12.02
Energy Charges:		
<i>Summer:</i>		
On-Peak (4p-9p Weekdays)	\$/kWh	0.44
Mid-Peak (4p-9p Weekends)	\$/kWh	0.33
Off-Peak (All other hours)	\$/kWh	0.17
<i>Winter:</i>		
Mid-Peak (4p-9p Weekdays)	\$/kWh	0.41
Off-Peak (9p-8a Daily)	\$/kWh	0.16
Super Off-Peak (8a-4p Daily)	\$/kWh	0.16
TOU Differentials		
Summer On: Off-Peak		2.6 : 1
Winter On: Super Off-Peak		2.6 : 1

# Proposed Default Rate: SDG&E TOU-DER

## 2021 Revenue Requirement

Charge	Unit	Total Rate
Customer Charge	\$/month	\$ 24.10
Energy Charges:		
<i>Summer:</i>		
On-Peak	\$/kWh	0.54
Off-Peak	\$/kWh	0.28
Super Off-Peak	\$/kWh	0.22
<i>Winter:</i>		
On-Peak	\$/kWh	0.24
Off-Peak	\$/kWh	0.23
Super Off-Peak	\$/kWh	0.22
TOU Differentials		
Summer On: Super Off-Peak		2.5 : 1
Winter On: Super Off-Peak		1.1 : 1

\*Peak periods as defined by SDG&E's default residential TOU rate, TOU-DR1