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Community Advisory Committee

October 5, 2023

Item 1: CEO Update

Item 1: CEO Update

- 9/28/23 CEA Board Meeting Recap
  - CEO Appointment
  - Staff Recruitment Update

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Questions/Discussion

Item 2: Solar Plus Program Update

Distributed Microgrids

A Residential Solar + Battery Storage Solution

10/05/2023

SOLAR PLUS

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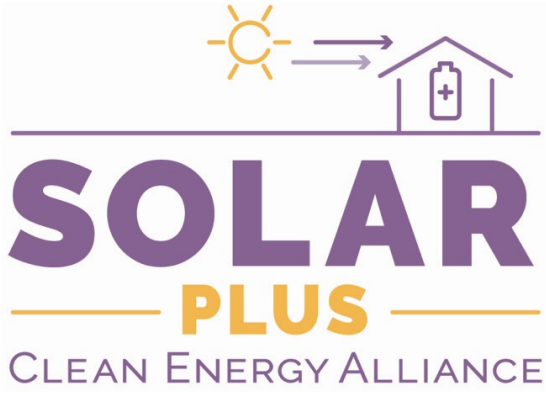

- $0 upfront costs to homeowners for solar + batteries
- Lowest $/kWh available in the market (to the end customer)
- Long-term customer pricing stability
- Available to all customers and easily transferrable
- No operational and maintenance costs to homeowners
- 100% renewable energy and emergency backup power

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Item 2: Solar Plus Program Update

- 10/26
  - Agreements Scheduled for Board Consideration
  - Public Hearing for Solar Plus Rate
- Solar Plus – Distributed Microgrid Program
  - Provides access to Rooftop Solar and Battery Storage with $0 upfront costs to residential customers
    - No Credit Application or Credit check
  - Supports CEA's goals of reducing greenhouse gas emissions while removing barriers to access to clean energy
  - Reduces energy costs to customers through the proposed new flat rate.

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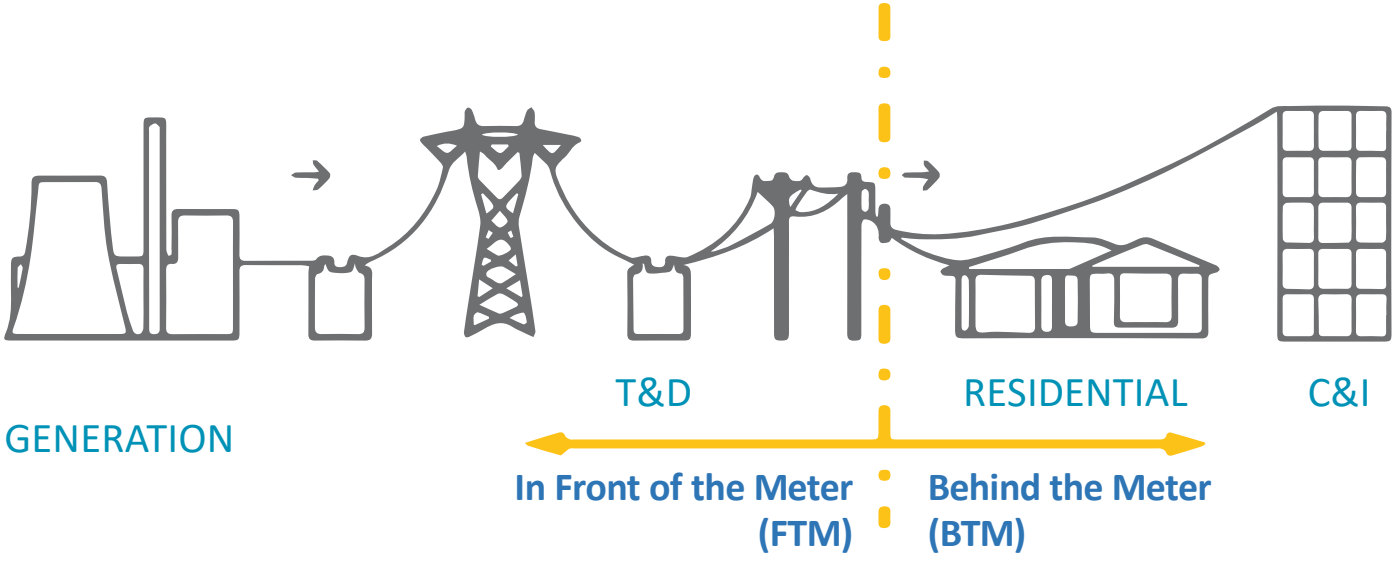
What is a Distributed Microgrid?

Pairing of residential rooftop solar with home energy storage

- Localized, behind-the-meter distributed energy resources that self-generate renewable energy and allow disconnect from the main grid to operate autonomously during power outages.



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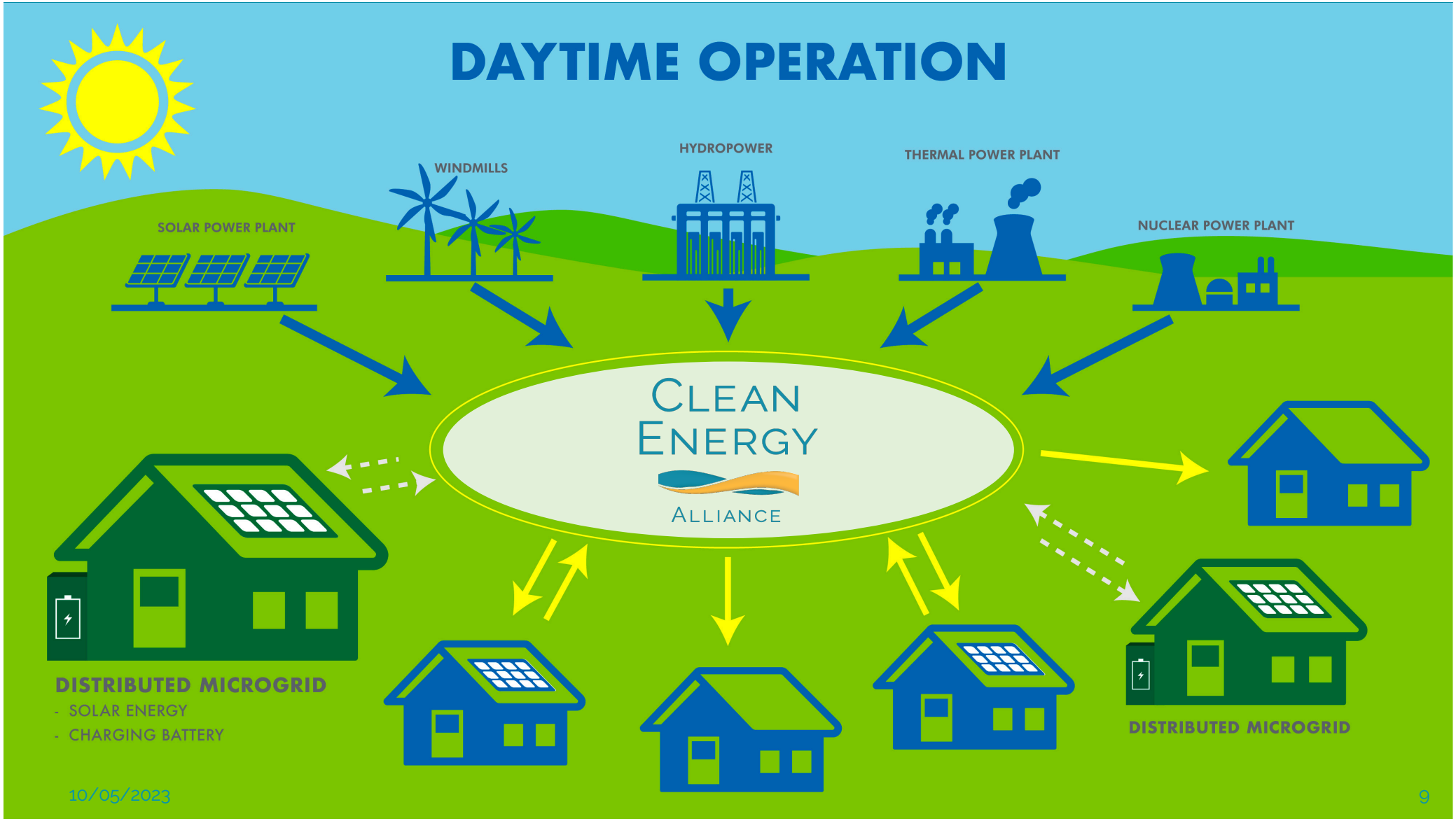
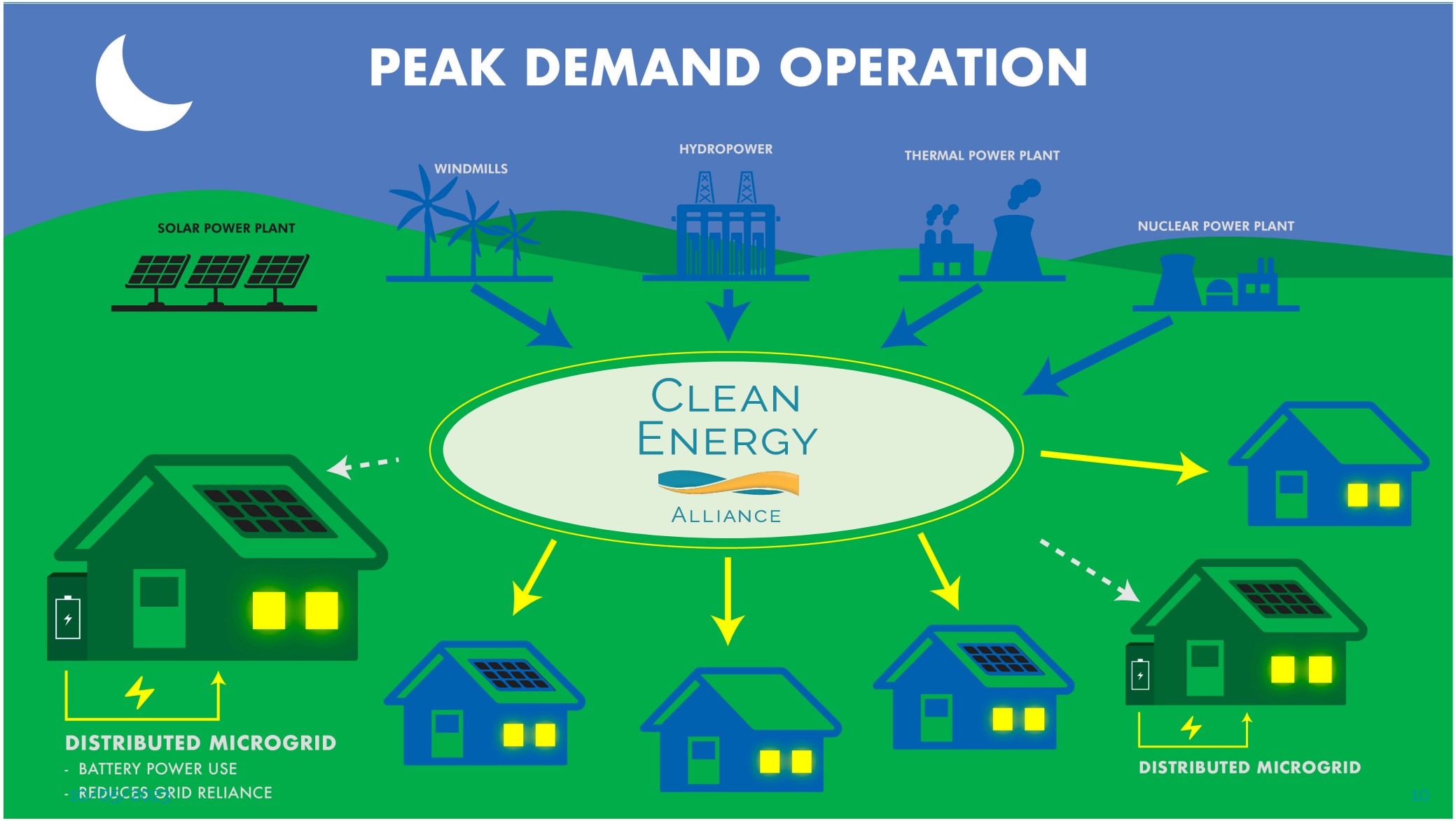
DAYTIME OPERATION




PEAK DEMAND OPERATION
WINDMILLS
HYDROPOWER
THERMAL POWER PLANT
SOLAR POWER PLANT
NUCLEAR POWER PLANT
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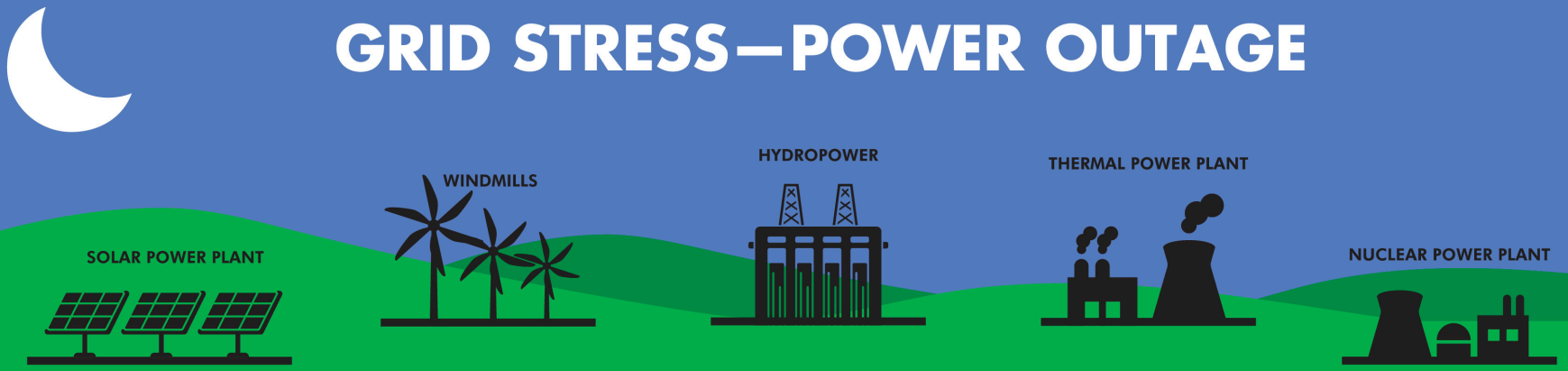
DISTRIBUTED MICROGRID
- BATTERY POWER USE
- REDUCES GRID RELIANCE
DISTRIBUTED MICROGRID

GRID STRESS—POWER OUTAGE



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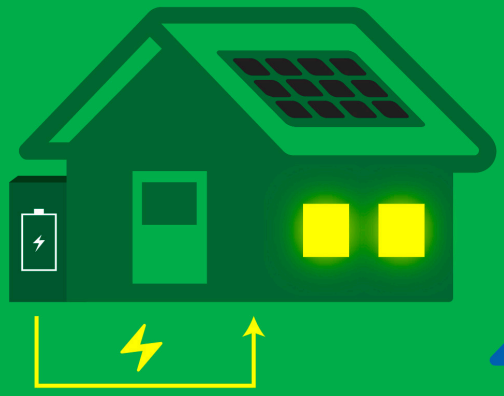
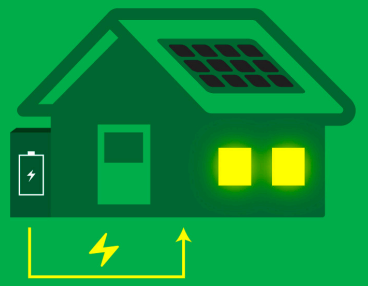


DISTRIBUTED MICROGRID

- OPERATES ON BATTERY BACKUP



DISTRIBUTED MICROGRID

Why the program was created

Deficiencies in current power offerings

STABILITY	GREEN ENERGY	EQUITY
• high heat and natural emergencies make the grid unstable	• encouraging solar & battery for customers causes JPA load loss	• some customers do not have sufficient cash or can qualify for loans to purchase solar and batteries
• move toward electrification strains the electricity network	• renters do not have access to solar and battery systems	• traditional PPA's are unable to serve customers with low FICO scores
• volatile weather conditions have financial implications for JPAs	• lack of ability for customers to take advantage of grid offerings	• traditional PPA's can make it difficult to transfer during home sales due to buyer qualification requirements

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Benefits of a Distributed Microgrid

For the Customer:

- Creates **RESILIENCY** by enabling whole home back-up
- Generates and consumes **SOLAR** on site, pulling from the batteries to significantly avoid utility delivery costs and the negativities of NEM 3.0
- Promotes **EQUITY** by providing a simple, competitive, $0 up-front cost, no FICO requirement path to go solar + batteries

For CEA:

- Creates **GRID STABILITY** and power pricing certainty
- **GREEN ENERGY** is created locally and provides renewable energy credits to meet requirements
- Supports **CEA CUSTOMER RETENTION** by providing customers with the best value offer in the market (which maintains load flowing through CEA long term)

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The program partners?

Tesla, Inc.

- Leading electric vehicle, charging infrastructure, solar and battery manufacturer.
- Offers Turnkey residential, new homes, commercial and utility scale solar and battery operations throughout CA.

Participate.Energy LLC

- Team comes from Corporate Credit, Inc. founded in 1994.
- Over 250MW of rooftop solar developed since 2008.
- Co-developed with Tesla, ~$300,000,000 of SGIP ER battery projects.
- Lent over $5 billion of corporate loans in connection with tax-based transactions.
- Focused on developing, capitalizing and managing the JPA Fund – including on-going operations.

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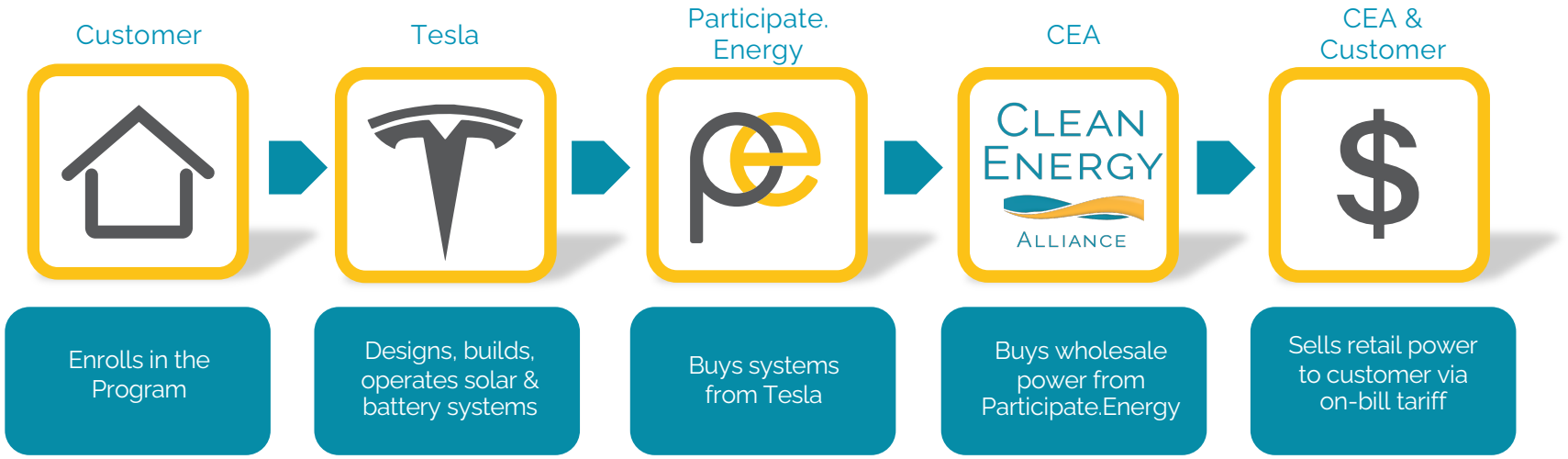
Program process



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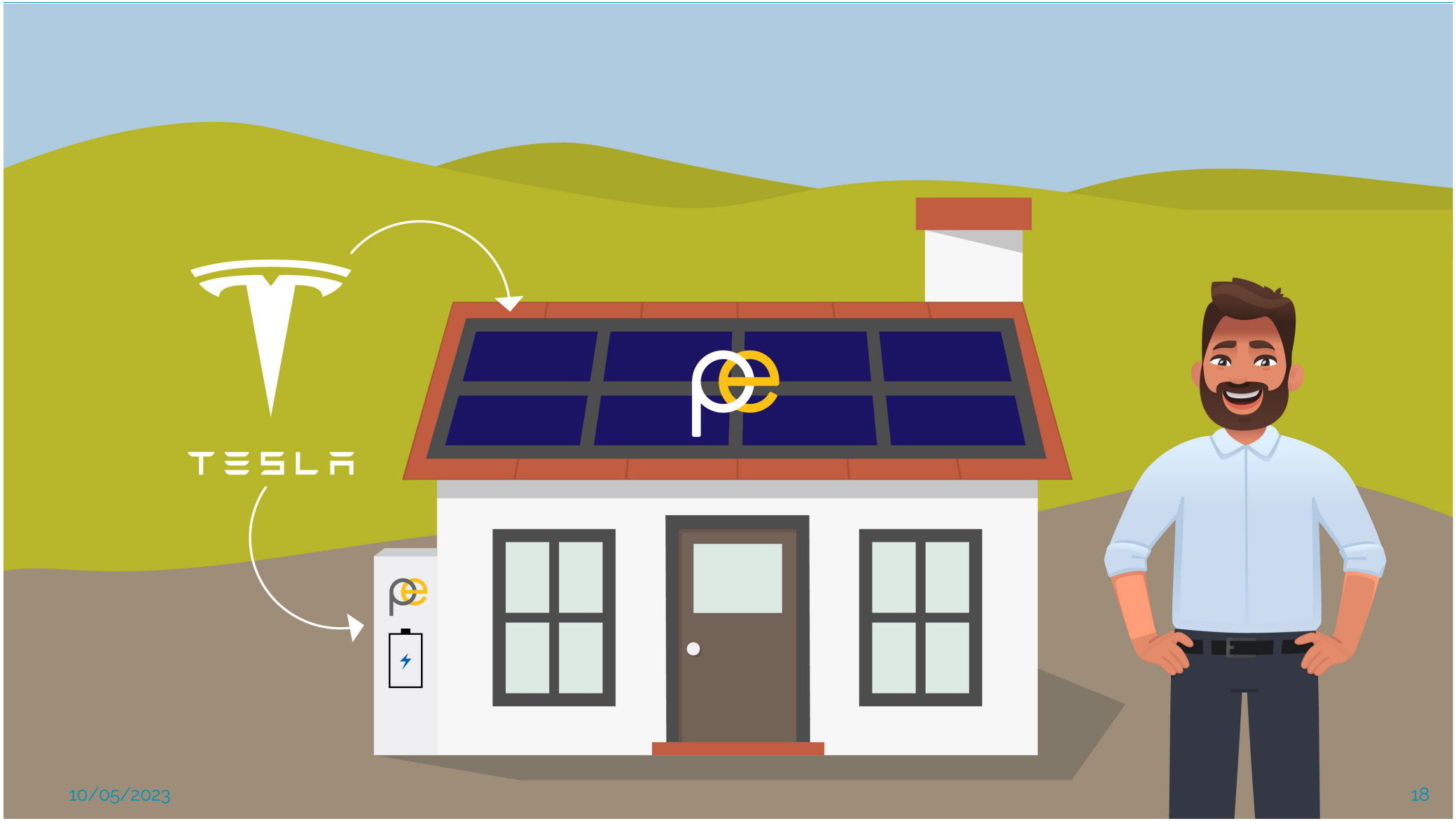
TESLA

participate. energy


Solar Plus - Distributed Microgrid
SOLAR PLUS
TESLA
CLEAN ENERGY ALLIANCE
CONTRACT
$0
Homeowner


TESLA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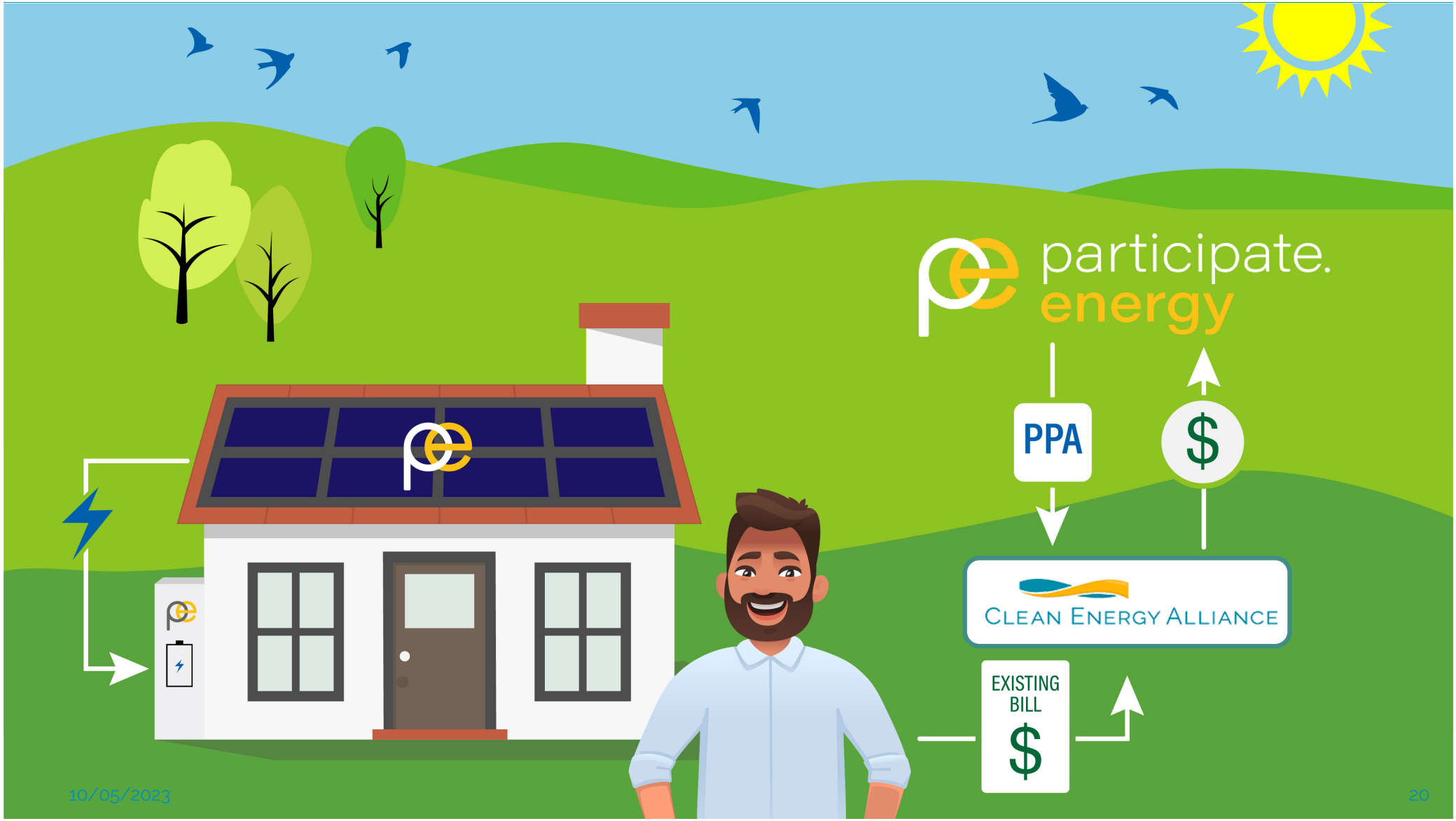
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Economic Flexibility for CEA

Per 1,000 homes: ~$3M* is earned at deployment plus $18M* over the next 30 years. Economics from the partnership can be allocated to CEA, to the customer, or to both

1,000 Distributed Microgrid Homes

= $15-20 Million

25 YEARS + 5 YEAR EXTENSION

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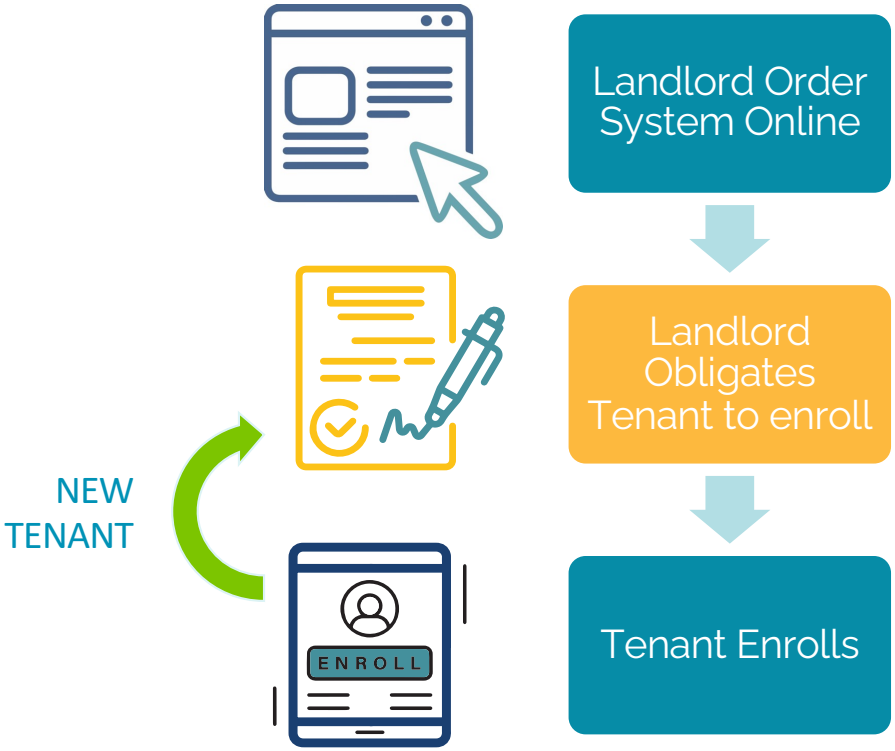
Additional Customer Savings

*these amounts are based on an average solar system size of 8.5 kWdc & 1.75 Powerwall batteries per home across a range of solar insolation factors

Residential Renters Program

- Same program with Landlord commitment and Tenant participation
- No credit underwriting
- Seamless transfer to new tenant (no underwriting)
- Pass-through terms and pricing from tenant to tenant
- Fixed pricing and increases over time
- Upon request, can provide landlord with template legal language for tenants



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Questions/Discussion

Item 3: Solar Billing Plan (NEM 3.0)

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- Solar Billing Plan
  - New Net Energy Metering Compensation Plan
  - Effective in SDG&E 12/15/23
    - For customers that submit NEM Applications after 4/15/23
  - Customers currently on NEM 1.0 and NEM 2.0 will remain through the end of 20-year legacy period
    - Will transition to SBP with SDG&E when term ends
  - Reduces the credit received by customers for solar energy generation
    - Credit based on SDG&E Energy Export Credit prices instead of applicable retail rate
  - Increases benefits of battery storage
    - Battery charged during low prices and used during peak prices avoiding high costs

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Item 3: Solar Billing Plan (NEM 3.0)

- CEA NEM Customer Statistics
  - Residential – 22,300
  - Non-Residential – 300
  - NEM 1.0 Legacy – 6,500
  - NEM 2.0 Legacy – 16,000
  - To Transition to SBP - 100

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Item 3: Solar Billing Plan (NEM 3.0)

- SBP impacts to customers:
  - Higher monthly bills compared to NEM 1.0 & 2.0
    - Significant decrease in export value of solar energy put onto grid
    - Average Annual Increase - $700 Generation cost only ($58 per month)
    - T&D is in addition to above – Costs unknown to CEA
  - Extends pay back term of purchased solar systems
    - Estimated from 5-year to 9-year pay back
  - Monthly account true-up
    - Annual True-up no longer applicable
  - Customers with NEM applications submitted after 4/15/23 temporarily placed on NEM 2.0 by SDG&E until implementation of SBP

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Item 3: Solar Billing Plan (NEM 3.0) – CEA Options

Option	Customer Consideration	CEA Consideration
Keep customers on NEM 2.0	• Continues shorter pay-back period • Maintains higher value of energy export • Lower Monthly Generation Costs • T & D and Gen on different plans – confusion • Lower Value of Storage	Loss of revenue – Estimated at $3,000,000 annually
Implement Solar Billing Plan as established by CPUC	• Consistency in T & D and Gen Cost Calculations • Higher value of Storage	Revenue Increase – Estimated at $3,000,000 annually
Implement Modified Solar Billing Plan	• Eases difference between NEM 2.0 & SBP	Lower Revenue Increase

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Item 3: Solar Billing Plan (NEM 3.0)

- Potential Modified Solar Billing Plan Options
  - Increase value of export – Adder to per kWh value
    - For specific period of time? (e.g. 5-year term)
  - Maintain Net Surplus Compensation Calculation
    - SBP nets out the export value when calculating Net Surplus Compensation

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Questions/Discussion

Item 4: Provide Input to Draft Feed-In-Tariff (Community Solar)

Item 4: Draft Feed-In-Tariff Input

What is a Feed-In-Tariff?

- Purchase offer of small-scale local renewable energy
- Incentivizes local renewable energy projects
- Also known as Community Solar
- Board identified as high-priority program
  - Draft program for Board consideration 10/26/23
- Offer Price takes into account Value of Local Generation

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Item 4: Draft Feed-In-Tariff Input

Staff Recommendations

- 2MW limit – up to 4 initial projects
- 500KW – 1MW Project Size
- Within CEA Territory
- New Build Project
- 20-Year Purchase Agreement
- Fixed per MW hour price
- Bonus Incentives
  - Battery Storage paired with Solar

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Questions/Discussion