SELF-GENERATION INCENTIVE PROGRAM

# SGIP 3rd Quarterly Workshop of 2024

*September 20, 2024*

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SoCalGas

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# Welcome and Introductions

*Sandi Linares-Plimpton, SoCalGas*

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# Welcome and Introductions

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## PROGRAM ADMINISTRATORS & SUPPORT TEAMS

**SCE:**

- Jim Stevenson
- Vicky Velazquez

**SoCalGas:**

- Jason Legner
- Laura Diaz
- Adrian Martinez
- Ashley Pezikian
- Jan Santos
- Sandi Linares-Plimpton

**CSE:**

- Shalene Watanabe-O'Toole
- Lupe Knox
- Jess Hilton

**PG&E**

- Ron Moreno
- Ozzy Guzman
- Jacklin Campos-Perez

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## CONSULTANTS AND ENERGY DIVISION

**AESC (Technical)**
- Dara Salour
- Stephanie Raya
- Robert Cobb

**Energy Solutions (Database)**
- Kelsey Albers
- Alejandro Prieto
- James Marin

**Energy Division (CPUC)**
- Justin Galle
- Gabriel Petlin
- Maya Noesen

**Verdant**
- Brian McAuley

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## 3rd Quarter SGIP Workshop & IRA Tax Credit Workshop Agenda

*9:00* **Welcome, Introductions** *(Sandi Linares-Plimpton, SoCalGas)*

*9:05* **Teams Meeting Information and Safety Message** *(Sandi Linares-Plimpton, SoCalGas)*

*9:10* **Regulatory Updates** *(Shalene Watanabe-O'Toole, CSE / Ron Moreno, PG&E / Jim Stevenson, SCE)*

*10:00* **SGIP Database Changes** *(Kelsey Albers, Energy Solutions)*

*10:30* **Storage Sizing** (*Ashley Pezikian*, SoCalGas, *Brian McAuley, Verdant)*

*11:15* **3rd Quarter SGIP Workshop Q&A** *(Sandi Linares-Plimpton, SoCalGas)*

*11:50* **Conclude 3rd Quarter SGIP Workshop**

***10-minute break***

*12:00* **Begin IRA Tax Credit Workshop** *(Alvin Lee, CPA/Partner at NOVOGRADAC & Co. LLP)*

*12:05* **Presentation**

*12:30* **Open Discussion**

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# Teams Meeting Information and Safety Message

*Sandi Linares-Plimpton, SoCalGas*

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# Teams Meeting Information and Safety Message

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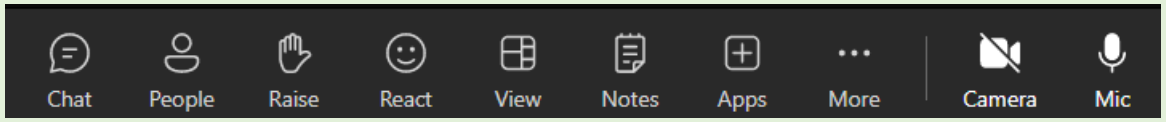
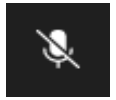
**Teams Meeting – General Information/Participation**

| Function | Teams Icon |
|---|---|
| Controls |   |
| Mute – *Remain muted unless called on* |  |
| Raise Your Hand – *Wait until you are acknowledged and then unmute yourself to speak.* |   |
| Chats - *Questions may get a response in the chat by a PA or it may be addressed during the Q&A portion. If you are not a PA and responding to chat questions, please include the name of the company you are representing.* |  |

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# Safety Message

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**September is Emergency Preparedness Month**

**Earthquake Safety**

- Drop, Cover, Hold (Indoor)
  - **Drop** onto your hands and knees. This position protects you from being knocked down and reduces your chances of being hit by falling or flying objects.
  - **Cover** your head and neck with one arm and hand.
    - If a sturdy table or desk is nearby, crawl underneath for shelter.
    - If no shelter is nearby, crawl next to an interior wall.
  - **Hold On** until the shaking stops.
    - Under a sturdy table or desk: hold on to it with one hand; be ready to move with your shelter if it shifts.
    - No shelter: hold on to your head and neck with both arms and hands.

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# Regulatory Updates

*Shalene Watanabe-O'Toole, CSE*
*Ron Moreno, PG&E*
*Jim Stevenson, SCE*

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# Regulatory Updates - Implementing Certain Programmatic Changes AL

*Shalene Watanabe-O'Toole, CSE*

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# Regulatory Updates - T1 AL

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**T1 Advice Letter Implementing Certain Programmatic Changes**
**Filed June 4, 2024**

- Requirement for General Market applicants with existing solar be transitioned to Net Billing Tariff (NBT) and all eligible TOU rates adopted in NBT Decision are deemed SGIP approved
- Requirement for applicants to enroll in an SGIP qualified Demand Response (DR) program
- Provides PA authority to change or remove Small Residential Storage soft target
- Removal of the requirement to separately meter non-incentivized on-site storage systems
- Removal of the requirement for unanimous Working Group approval for extensions
- Removal of the requirement for proof of deed restrictions on single family homes
- Expands categorical eligibility to include income verified CARE, FERA, and ESA participants
- Requirement for additional documentation for participants not claiming ITC
- Requirement for part number and/or serial number of associated equipment on applications
- Establishes annual deadline for data submission will be set in the future

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# Regulatory Updates – Advanced Payment AL, Fund Shifting AL

*Ron Moreno, PG&E*

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# Advanced Payment Program

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- Decision 24-03-071 concluded that a lack of upfront capital and financing is a barrier for low-income customers to participate in the SGIP, and requires the following:
  - Requires the SGIP PAs to create an Advanced Payment Program modeled after PG&E's Financial Assistance Pilot.
  - Upfront payment of 50% of the incentive amount must occur at the RRF stage.
  - Requires developers to offer a no-money down enrollment process to their customers.
  - Require the SGIP PAs to develop a proposal within 90-days of the decision, and to hold a workshop regarding the proposal.

- The SGIP PAs shared their proposal during the Q2 2024 workshop on May 17, 2024.
- On June 20, 2024, the SGIP PAs submitted Advice Letter 4924-G/7301-E to effectuate the Advanced Payment Program.

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# Advanced Payment Program cont.

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On 8/21/2024, the CPUC issued Draft Resolution E-5346, which proposed the following changes to the Advanced Payment Program

- Removal of a Better Business Bureau rating while adding a negative BBB screen.
- Requiring all APP developers to have successfully completed a residential SGIP application in the past.
- Incorporate the Commissions' Public Watch List of Non-Compliant Solar Providers when available.
- Reduced the APP project extensions from three six-month extensions to one six-month extension. Tribal applications are excluded.
- All APP developers have access to a statewide upfront incentive cap of $1 million.
  - Developers that meet the higher upfront incentive requirements will have access to $2 million in SoCalGas, CSE, and LADWP territories, and $5 million across all PA territories.

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# Enhanced Powerline Safety Settings

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**Definition**: Enhanced Powerline Safety Settings (EPSS) allow PG&E's powerlines to automatically turn off power within one-tenth of a second. This can happen when there's a hazard, like a tree branch falling into a powerline, which can cause a fire. These settings are in high fire-risk and surrounding areas.

In PG&E's comments to the Assigned Commissioner's Ruling, it recommended to add EPSS events to the SGIP's resiliency definition, as many customers are being affected by EPSS events.

Decision 24-03-071 authorized EPSS to be included in the SGIP's resiliency definition and required an Advice Letter to be submitted 120 days from the issuance of the decision.

On July 22, 2024, PG&E submitted Advice Letter 4945-G/7335-E to request that the EPSS qualification be 5 EPSS events and for those events to start in 2023. On August 23, 2024, PG&E Advice Letter was approved.

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# PG&E Fund Shifting AL

SELF-GENERATION INCENTIVE PROGRAM

On July 5, 2024, PG&E submitted Advice Letter 4930-G/7316-E to request to move $18.8 million from the Generation budget to PG&E's admin budget ($10.8 million), Equity Resiliency budget ($5 million), and Small Residential budget ($3 million).

The CPUC approved PG&E's request on August 6, 2024.

On August 7, 2024, PG&E transferred funds to those budgets.

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# Regulatory Updates – Opening AB 209 AL

*Jim Stevenson, SCE*

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# Regulatory Updates

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- In March 2024, the Commission adopted the Decision (D.)24-03-071 to allocate $280 million from the Greenhouse Gas Reduction Fund (GGRF) to SGIP and, among other things, to modify and establish incentive levels for storage and solar paired with storage in the Residential Solar and Storage Equity (RSSE) budget and for storage in the San Joaquin Valley (SJV) Pilot budget.

- On August 5, 2024 - The Self-Generation Incentive Program (SGIP) Program Administrators (PAs), submitted a Tier 2 Advice Letter* to propose revisions to the Self-Generation Incentive Program (SGIP) Handbook pursuant to Ordering Paragraph (OP) 23 of D.24-03-071 to receive applications for Assembly Bill (AB) 209 projects for standalone storage or solar paired with storage. (Attachment A of the advice letter provided a redlined copy of the Handbook indicating the proposed updates.)

*Advice 5347-E; Advice 157-E; Advice 6350-G; Advice 4952-G/7345-E

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# Regulatory Updates

SELF-GENERATION INCENTIVE PROGRAM

Modification of Residential Storage Equity budget category name to Residential Solar and Storage Equity (RSSE) budget. (AB 209 funded projects are subject to the existing program rules, except where modified in the Decision and in the current SGIP Handbook.)

- $280 million Statewide RSSE budget allocated to Program Administrators pursuant to AB 209
  - Funding is allocated to the primary program functions: 90% to Incentives; 5% for Administration; and 5% for activities related to M&E and ME&O.

  - SGIP RSSE budget for administration by (1) existing Program Administrators PG&E, SCE, SoCalGas, and SDG&E (Center for Sustainable Energy (CSE) administers the SGIP in SDG&E service territory) and (2) a new Program Administrator for Los Angeles Department of Water and Power (LADWP)

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**Pursuant to the Decision the Budget is allocated as outlined in the following table:**

| Program Administrator | Total Incentive Budget (in $ millions) |
|---|---|
| Pacific Gas and Electric Company | $99.0 |
| Southern California Edison Company | $87.3 |
| Los Angeles Department of Water and Power | $32.4 |
| San Diego Gas and Electric Company | $19.8 |
| Southern California Gas Company | $13.5 |
| **Total Incentive Budget** | **$252** |

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**The Decision updates the following incentive levels for RSSE and SJV Residential budget categories:**

| Budget Category | Incentive Rate |
|---|---|
| RSSE | Storage: $1.10 / Wh |
| | Solar: $3.10 / W |
| SJV Residential | Storage: $1.10 / Wh |

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The allocation of PA administration throughout the state for AB 209 funding will be done by assigning all electric territories across the state to one of the existing PAs and LADWP electric customers will be assigned to the new PA selected by LADWP.

The Handbook will be updated with the guidance provided by the Commission on the administration of AB 209 funds, which includes the following:

- AB 209 funded projects are required to comply with CARB reporting requirements.
- PAs must return any unspent AB 209 funds to Commission by June 30, 2028, pursuant to the statutory requirement for the Commission to liquidate these funds.
- Any customers or LSEs not listed in Appendix D – PA Assignments, will be served by PG&E.
- PAs who administer SGIP to both IOU and POU electric customers are required to ensure that there is a proportionate share of their allocation for incentives available only to customers of POUs as outlined in Appendix F.

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- **Incentive Soft Cap of AB 209 Funds for Tribal Customers**
  - Two percent of each PA's AB 209 incentive funds are reserved for tribal customers.
  - PAs may, through a Tier 2 Advice Letter, increase or decrease this initial percentage
  - Any funds from this set aside that remain unencumbered in the final 12 months of the program shall be made available to any eligible SGIP customer.

- **New Solar Applications, Incentive Levels and Requirements**
  - The Decision authorizes the PAs to update the SGIP Handbook and Database to receive applications for AB 209 projects for standalone storage or solar paired with storage.

- **Solar Incentive Applications System Costs**
  - Applications for solar incentives must include costs delineated as follows: solar equipment, inverter costs, labor cost and the balance of system costs.
  - Meter collars and meter socket adapters are considered eligible project costs.

- **Solar Inverter Eligibility**
  - Solar inverters are an eligible solar cost component. Solar inverter upgrades or replacements are eligible costs if one of the following conditions are met: (i) a new inverter is required to add storage or additional incentivized capacity to an existing solar system; and (ii) a new inverter is to replace the existing inverter if the existing one is over 10 years old or out of warranty.

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- **DAC-SASH and SOMAH Technical Solar Requirements**
  - Modifications are made to the SGIP Handbook to align SGIP's solar incentive requirements with the technical solar requirements of the DAC-SASH and SOMAH programs pursuant to OP 23.

- **Addition of Manufacturer as an SGIP Participant**
  - Pursuant to OP 33, Manufacturers will be added to the "Program Participant" list in Section 3 and to the Definitions and Glossary in the SGIP Handbook. The definition and description of the Manufacturer role in the program will be detailed in the appropriate Handbook sections.
  - The Handbook will also incorporate the Manufacturer's obligation to submit operational and performance data when requested by the SGIP evaluator. This new requirement will allow for a more comprehensive data submission for SGIP M&E reporting.

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- **IMPLEMENTATION OF RSSE BUDGET OPENING**
  - Pursuant to OP 23, the PAs clarify that while applications will be available for submission upon disposition of the advice letter
  - The PAs intend to initiate a pause period to allow participants time to familiarize themselves with the new RSSE budget requirements, draft those customer applications, and allow the PAs sufficient time to ensure all database development items are enabled and operational.
  - This is the standard process to allow for stakeholder engagement prior to launching a new program budget or enabling significant program redesign. The PAs will provide stakeholders with advance notice of the intended end-date of the pause period, allowing for new application submissions.
  - The pause period will not exceed 45 days post-Commission disposition of this joint advice letter.

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# Regulatory Updates – Summary

SELF-GENERATION INCENTIVE PROGRAM

## AB 209 ACTIVE REGULATORY FILINGS STATUS

| REGULATORY ITEMS | SUBMITTED | STATUS |
|---|---|---|
| **Implementing Certain Programmatic Changes T1 AL** (CSE Advice 152-E, SCE Advice 5312-E, SoCalGas 6317-G, PG&E Advice 4917-G/7289-E) | June 4 | Suspended |
| **Advanced Payment Program T2 AL** (PG&E Advice 4924-G/7301-E, CSE Advice 154-E, SCE Advice 5320-E, SoCalGas Advice 6323-G) | June 20 | Draft Resolution E-5346 issued and pending approval on September 26 CPUC Voting Meeting |
| **PG&E's Fund Shifting T2 AL** (PG&E Advice 4930-G/7316-E) | July 5 | Approved |
| **Enhanced Powerline Safety Settings (EPSS) T2 AL** (PG&E Advice 4945-G/7335-E) | July 22 | Approved |
| **Opening AB 209 T2 AL** (SCE Advice 5347-3; CSE Advice 157-E; SoCalGas Advice 6350-G; PG&E Advice 4952-G/7345-E) | August 5 | Suspended |
| **CSE's Fund Shifting T2 AL** (CSE Advice 158-E) | August 14 | Approved |

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# Regulatory Updates

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Questions?

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# Database Changes

*Kelsey Albers & James Marin, Energy Solutions*

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# SGIP Q3 Stakeholder Workshop
# **AB 209 Database Updates**

September 20, 2024


Kelsey Albers

Senior Project Manager, DER

James Marin

Senior Product Owner, DER

Energy Solutions

# Agenda

1. Released Changes: Resources
2. New RSSE Budget Category
3. Released Changes to Applications
4. New Program Administrator LADWP
5. AB 209 Funding Allocation
6. Advanced Payment Program
7. Solar and Storage Application

# Released Changes: Resources

- Eligible TOU Rates
  - All eligible electrification TOU rates adopted in NBT decision considered SGIP approved rates
- Eligible DR Programs
  - Incentive applicants required to enroll in approved qualified DR program from AB 209 decision (Appendix E)


SGIP-Approved Rates

| Rate | Electric Utility | Note |
|---|---|---|
| A-1-STORE | Pacific Gas and Electric | |
| DR-SES | San Diego Gas and Electric | |
| DR-SES (CARE) | San Diego Gas and Electric | |
| DR-SES (CARE MB) | San Diego Gas and Electric | |
| DR-SES (MB) | San Diego Gas and Electric | |
| E-6 | Pacific Gas and Electric | No longer exists as a rate |
| E-ELEC | Pacific Gas and Electric | Only for customers on the Net Billing Tariff |
| EM-TOU | Pacific Gas and Electric | |
| EV2-A | Pacific Gas and Electric | |
| EV-A | Pacific Gas and Electric | |
| EV-B | Pacific Gas and Electric | |
| EV-TOU | San Diego Gas and Electric | |
| EV- TOU | Alameda Municipal Power | |
| EV-TOU-2 | San Diego Gas and Electric | |
| EV-TOU-2 CARE | San Diego Gas and Electric | |
| EV-TOU-2 CARE MB | San Diego Gas and Electric | |

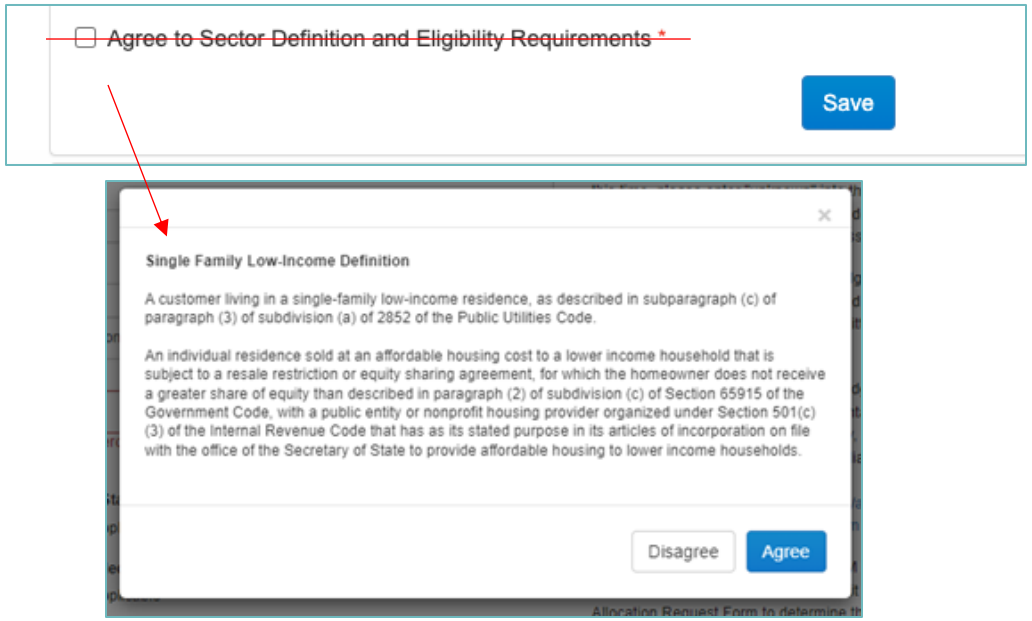
SGIP-Approved Demand Response Programs

| Electric Utility | Demand Response Program | Eligible Host Customer Sector |
|---|---|---|
| Pacific Gas and Electric | Capacity Bidding Program (CBP) | Commercial, Small Business, Educational Institution, Residential, Single Family, Multifamily, Multifamily Non-Residential |
| Pacific Gas and Electric | Peak Day Pricing | Commercial, Small Business, Educational Institution, Multifamily Non-Residential |
| Pacific Gas and Electric | SmartRate | Residential, Single Family, Multifamily |
| San Diego Gas and Electric | Capacity Bidding Program (CBP) | Commercial, Small Business, Educational Institution, Residential, Single Family, Multifamily, Multifamily Non-Residential |
| San Diego Gas and Electric | Critical Peak Pricing (CPP) | Commercial, Small Business, Educational Institution, Multifamily Non-Residential |
| San Diego Gas and Electric | Time-of-Use Plus Pricing Plan | Commercial, Small Business, Educational Institution, Residential, Single Family, Multifamily, Multifamily Non-Residential |
| Southern California Edison | Capacity Bidding Program (CBP) | Commercial, Small Business, Educational Institution, Residential, Single Family, Multifamily, Multifamily Non-Residential |
| Southern California Edison | Critical Peak Pricing (CPP) | Commercial, Small Business, Educational Institution, Residential, Single Family, Multifamily, Multifamily Non-Residential |

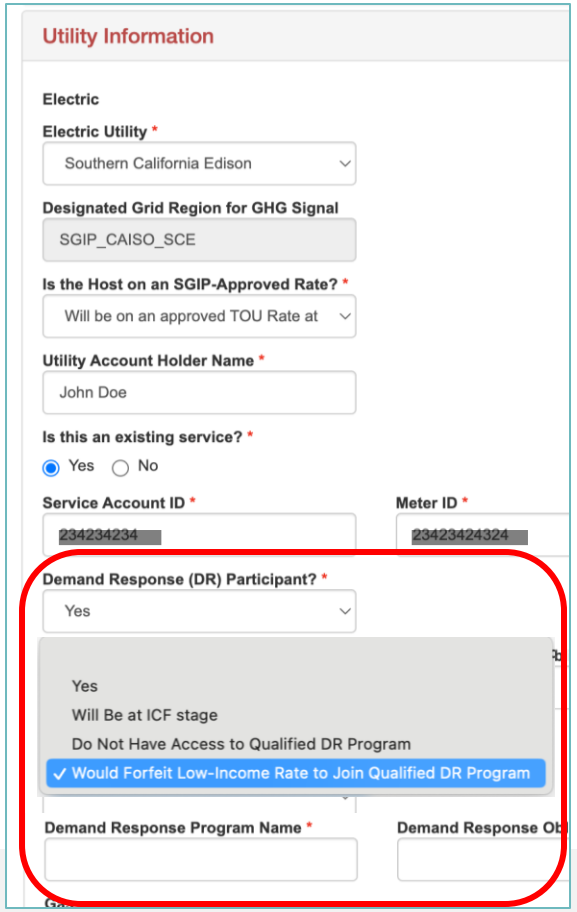
For SGIP participants in POUs, an SGIP approved qualified DR program is one that would use the storage device to (1) shifts onsite energy use to off-peak time periods or reduces demand from the grid by offsetting or lowering some or all of the customer's onsite energy demand, (2) is not an emergency DR program; and (3) the load impact from the storage device can be accurately measured and evaluated.

# Released Changes to Storage Applications

- Residential Equity, Equity Resiliency, and SJV Residential budgets: Removed “Agree to Sector Definition Eligibility Requirements” checkbox question and pop-up definition for applications with RRF Submitted date on/after June 4, 2024



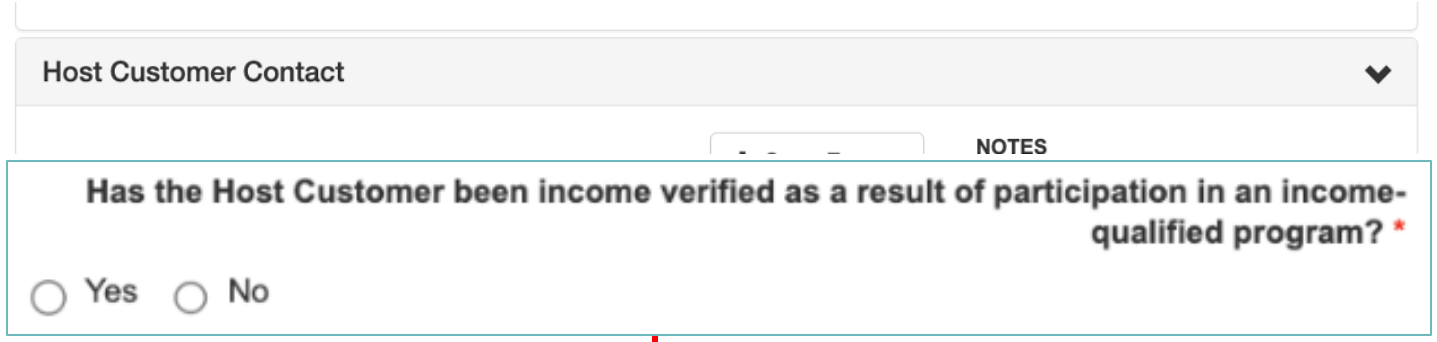

- Options for “Demand Response (DR) Participant?” updated due to program requirements
- “Demand Response Program Name” must be selected from dropdown list



# Released Changes to Storage Applications

New required question in RRF, PPM, and ICF for income verification, accompanied by document requirement

- Will also apply to solar + storage applications
- Applies to Res. Equity, Res. Equity Resiliency, San Joaquin Valley Residential budgets




If “yes”, the following question is required

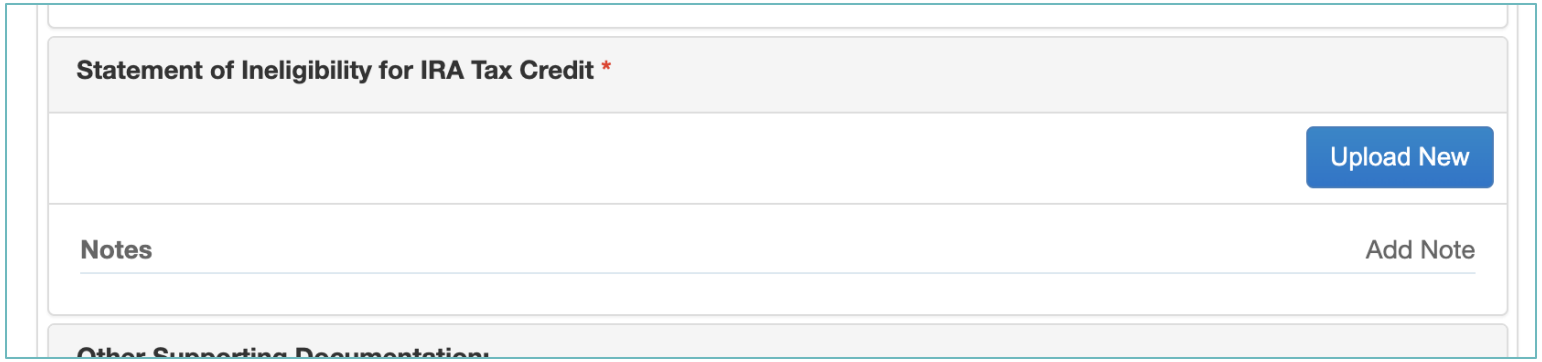
**Which program is the Host Customer enrolled in?**

- CARE
- FERA
- ESA

# Released Changes to Applications

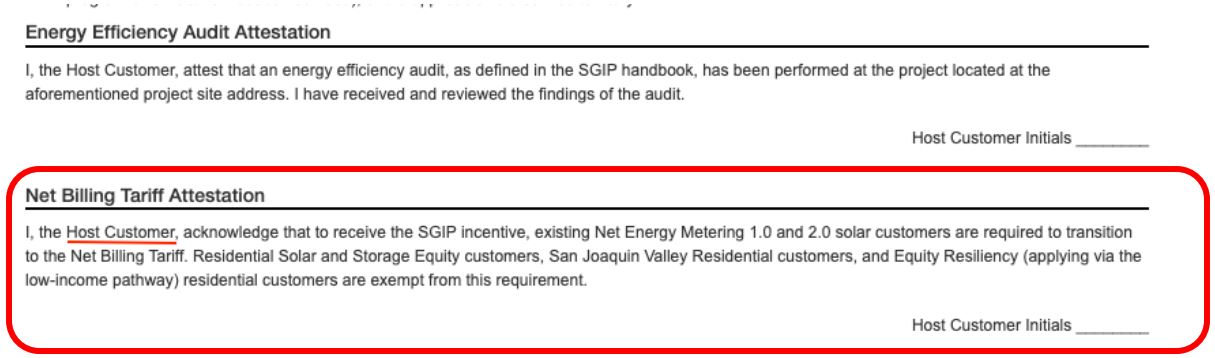
New document requirement for applicants **not** taking Federal ITC

- Applies to **Generation, storage, & solar + storage** applications for all budgets



# Released Changes to Storage applications

- New attestation language on transitioning to NBT on RRF & ICF print form
  - Will also apply to solar + storage apps



**Energy Efficiency Audit Attestation**

I, the Host Customer, attest that an energy efficiency audit, as defined in the SGIP handbook, has been performed at the project located at the aforementioned project site address. I have received and reviewed the findings of the audit.

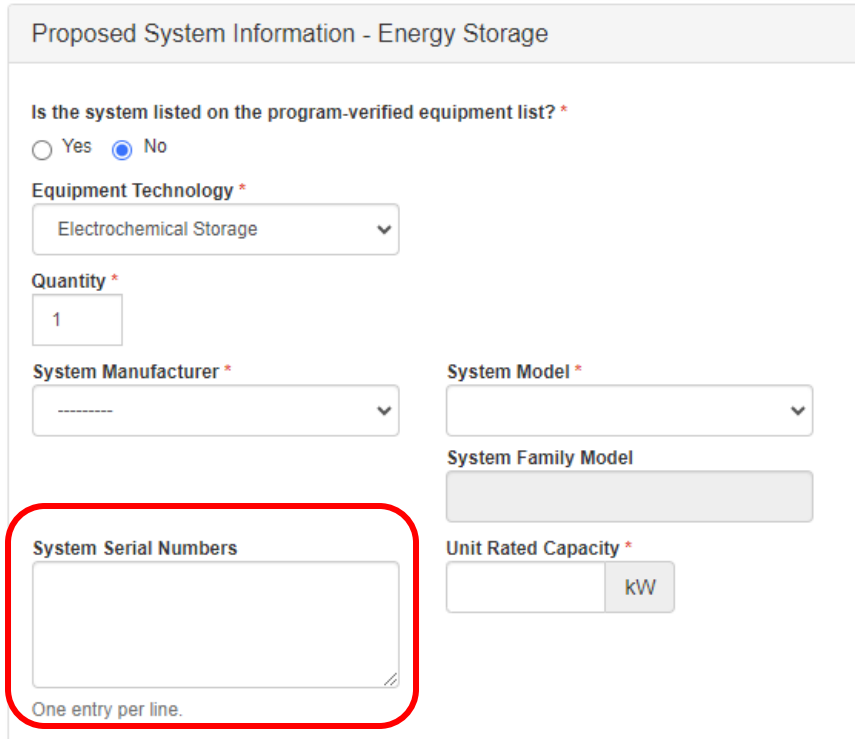
Host Customer Initials _____

**Net Billing Tariff Attestation**

I, the Host Customer, acknowledge that to receive the SGIP incentive, existing Net Energy Metering 1.0 and 2.0 solar customers are required to transition to the Net Billing Tariff. Residential Solar and Storage Equity customers, San Joaquin Valley Residential customers, and Equity Resiliency (applying via the low-income pathway) residential customers are exempt from this requirement.

Host Customer Initials _____

- New field proposed system *System Serial Number(s)* required at ICF
  - Will also apply to solar + storage apps



Proposed System Information - Energy Storage

**Is the system listed on the program-verified equipment list?** *

○ Yes ◉ No

**Equipment Technology** *

Electrochemical Storage

**Quantity** *

1

**System Manufacturer** *

---

**System Model** *

**System Family Model**

**System Serial Numbers**

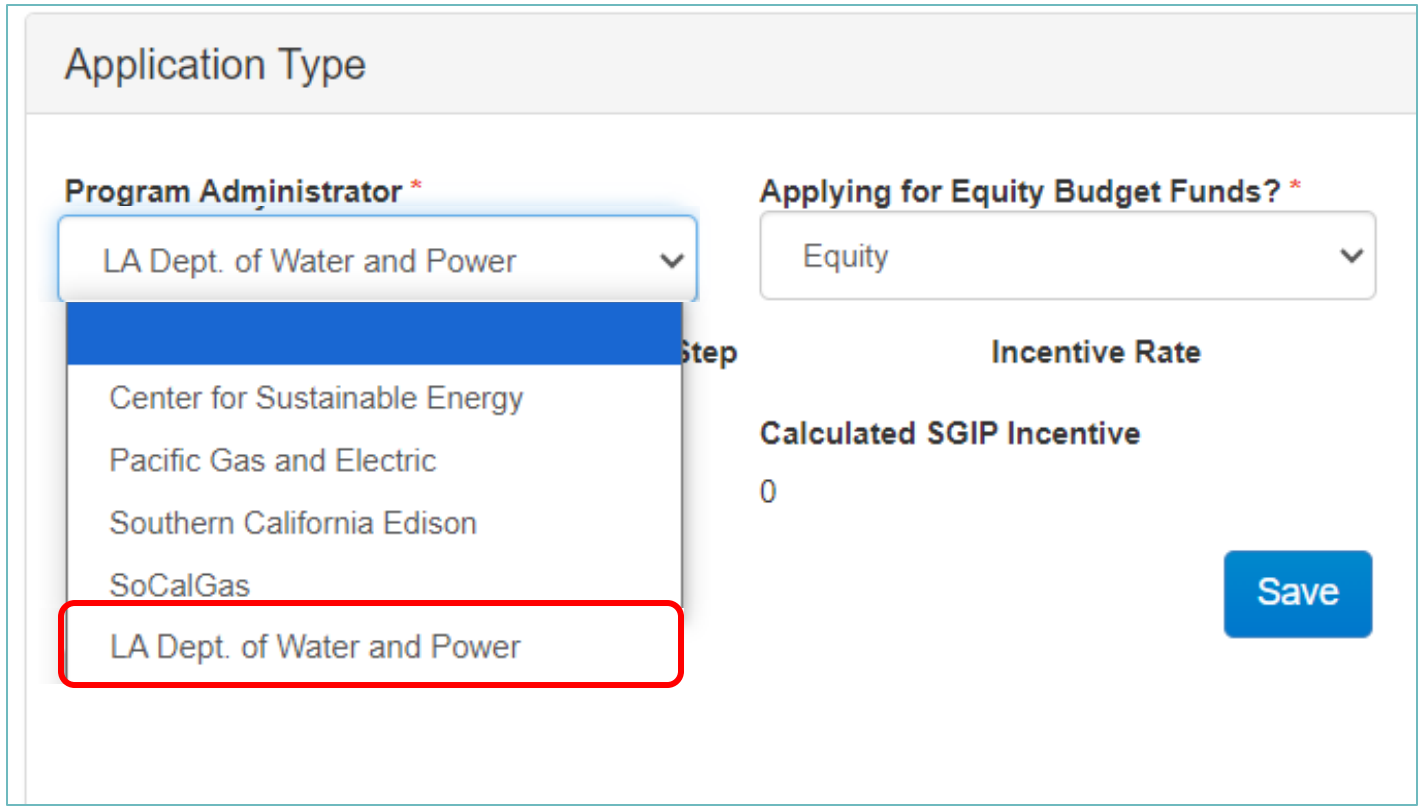
One entry per line.

**Unit Rated Capacity** *

kW

# New Program Administrator LADWP

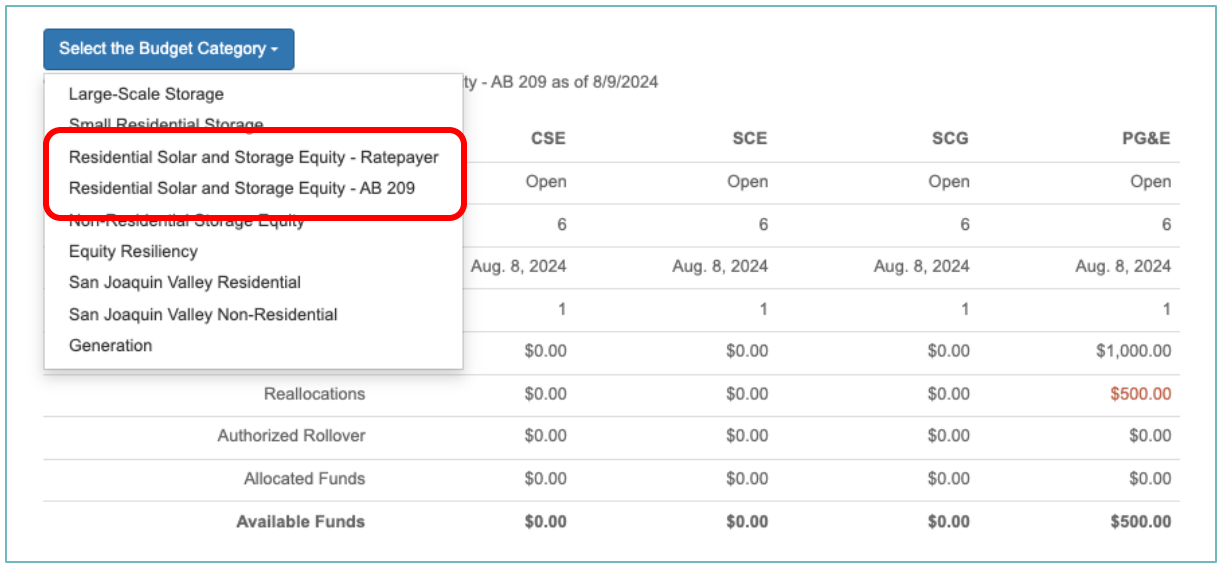
- Users will be able to select LADWP as a PA
- LADWP will have PA access to process applications



# New Budget Category: Residential Solar and Storage Equity

## Residential Solar & Storage Equity Budget

- *Residential Solar & Storage Equity – Ratepayer*: Storage only for IOU customers
- *Residential Solar & Storage Equity – AB 209*: Storage only & Solar + storage for IOU/POU/other LSE customers




| | CSE | SCE | SCG | PG&E |
|---|---|---|---|---|
| | Open | Open | Open | Open |
| | 6 | 6 | 6 | 6 |
| | Aug. 8, 2024 | Aug. 8, 2024 | Aug. 8, 2024 | Aug. 8, 2024 |
| | 1 | 1 | 1 | 1 |
| | $0.00 | $0.00 | $0.00 | $1,000.00 |
| Reallocations | $0.00 | $0.00 | $0.00 | $500.00 |
| Authorized Rollover | $0.00 | $0.00 | $0.00 | $0.00 |
| Allocated Funds | $0.00 | $0.00 | $0.00 | $0.00 |
| **Available Funds** | **$0.00** | **$0.00** | **$0.00** | **$500.00** |

Incentive Rates for Current Steps

The equipment and biogas incentive rates per PA territory are displayed in the table below. The table references the incentive rates for the currently active step in each PA territory and is updated nightly, or in the case of a lottery, after the results are published.

| | | CSE | SCE | SCG | PG&E |
|---|---|---|---|---|---|
| **Large-Scale Storage** | | **Step 4** | **Step 5** | **Step 5** | **Step 5** |
| | Energy Storage** | $0.30/Wh | $0.25/Wh | $0.25/Wh | $0.25/Wh |
| | Energy Storage + ITC*** | $0.22/Wh | $0.18/Wh | $0.18/Wh | $0.18/Wh |
| **Small Residential Storage** | | **Step 7** | **Step 7** | **Step 7** | **Step 7** |
| | Energy Storage** | $0.15/Wh | $0.15/Wh | $0.15/Wh | $0.15/Wh |
| **Residential Solar and Storage Equity - Ratepayer** | | **Step 6** | **Step 6** | **Step 6** | **Step 6** |
| | Energy Storage** | $1.10/Wh | $1.10/Wh | $1.10/Wh | $1.10/Wh |
| **Residential Solar and Storage Equity - AB 209** | | **Step 6** | **Step 6** | **Step 6** | **Step 6** |
| | Energy Storage** | $3.10/Wh | $3.10/Wh | $3.10/Wh | $3.10/Wh |
| **Non-Residential Storage Equity** | | **Step 5** | **Step 5** | **Step 5** | **Step 5** |
| | Energy Storage** | $0.85/Wh | $0.85/Wh | $0.85/Wh | $0.85/Wh |
| **Equity Resiliency** | | **Step 5** | **Step 5** | **Step 5** | **Step 5** |
| | Equity Resiliency | $1.00/Wh | $1.00/Wh | $1.00/Wh | $1.00/Wh |

# AB 209 Funding Allocation

The *RSSE – Ratepayer* budget will not have a waitlist or a lottery. If ratepayer funds run out, applications will move to AB 209 funds under *RSSE – AB 209* budget.

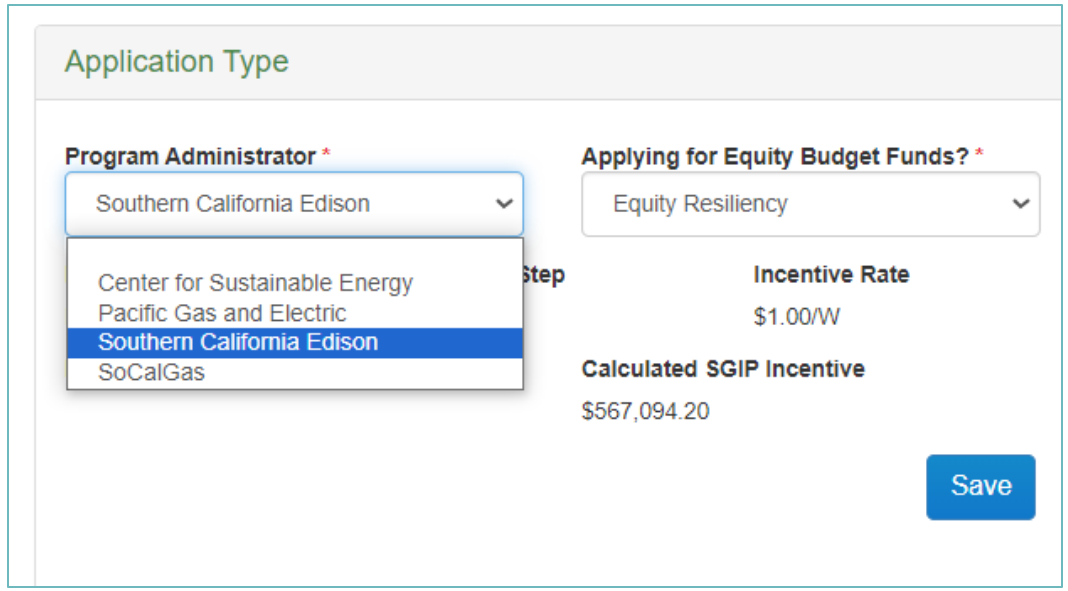
Waitlists

| | CSE | PG&E | SCE | SCG |
|---|---|---|---|---|
| Equity Resiliency | Waitlist | Waitlist | Waitlist | Waitlist |
| Generation | Waitlist | | | |
| Large-Scale Storage | Waitlist | | | Waitlist |
| Non-Residential Storage Equity | Waitlist | Waitlist | | |
| Residential Solar and Storage Equity - AB 209 | | | | |
| San Joaquin Valley Non-Residential | | | | |
| San Joaquin Valley Residential | | | | |
| Small Residential Storage | Waitlist | | | |

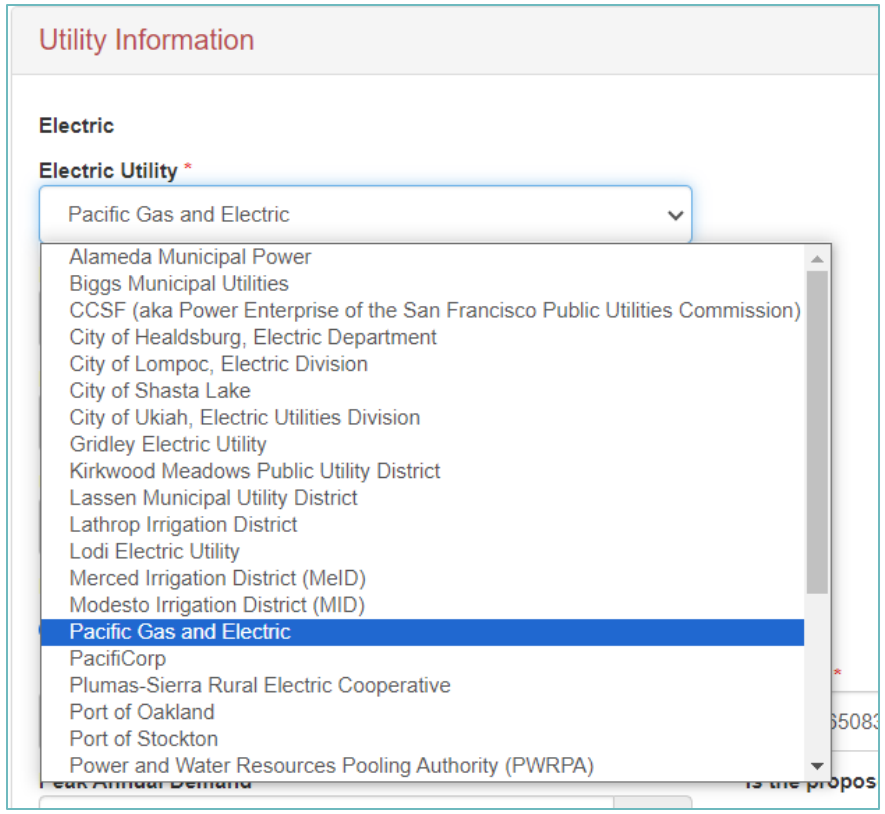
# AB 209 Funding Allocation

Applicants **do not** need to input Budget Category or Funding Source

- Database will determine RSSE-Ratepayer v. RSSE-AB 209 funding source based on user's selection of application type, electric and/or gas utility, along with other RSSE eligibility criteria




The applicant must initially select a PA, but **after** the application is submitted, the database will automatically select the appropriate PA



# Funding Caps

- The database will keep track of AB 209 funding requirements
  - Portion of RSSE-AB 209 funds set aside for POU customers in SCE and PG&E territories
  - Portion of RSSE-AB 209 funds set aside for Tribal customers is initially capped at 2%
  - Will be displayed on the Program Metrics Page

Residential Solar and Storage Equity Non-POU Customer Cap

Acceptance will be paused for Residential Solar and Storage Equity - AB 209 customers, once non-tribal reservation requests from such customers have reached the set cap percent per PA available funds for each residential incentive step. This report includes pending applications submitted today.

| PA | Cap % | Non-POU % | POU % | Cap $ | Non-POU $ | POU $ |
|---|---|---|---|---|---|---|
| **Step 6** | | | | | | |
| SCE | | % | % | $68,000,000 | $0.00 | $0.00 |
| PG&E | | % | % | $86,000,000 | $0.00 | $0.00 |

Residential Solar and Storage Equity Non-Tribal Cap

Acceptance will be paused for Residential Solar and Storage Equity - AB 209 customers, once non-tribal reservation requests from such customers have reached the set cap percent per PA available funds for each residential incentive step. This report includes pending applications submitted today.

| PA | Cap % | Non-Tribal % | Tribal % | Cap $ | Non-Tribal $ | Tribal $ |
|---|---|---|---|---|---|---|
| **Step 6** | | | | | | |
| CSE | 98% | % | % | $0.00 | $0.00 | $0.00 |
| SCE | 98% | % | % | $0.00 | $0.00 | $0.00 |
| SCG | 98% | % | % | $0.00 | $0.00 | $0.00 |
| PG&E | 98% | % | % | $0.00 | $0.00 | $0.00 |

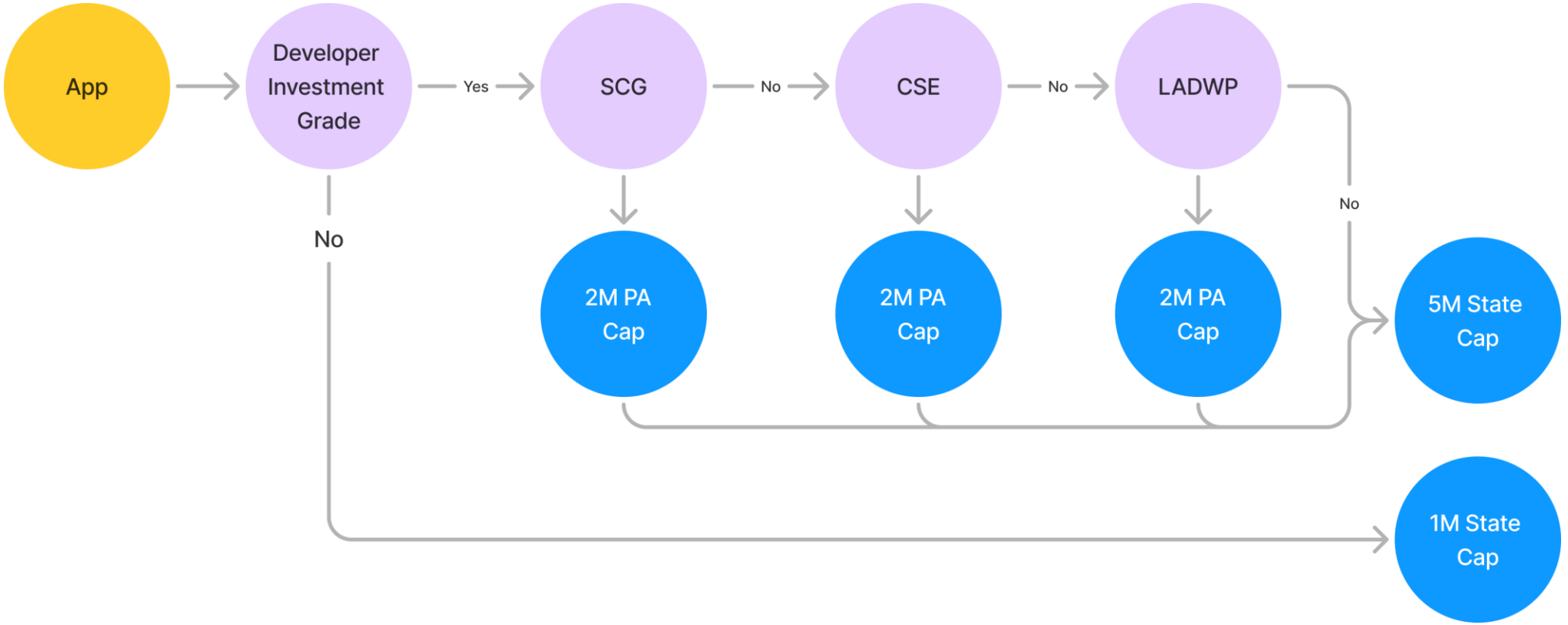
## Advanced Payment Program (APP)

- Applicants can select "Yes" to this question on the Developer Contact Panel, when submitting a new application


- Question is hidden for ineligible Developers
- Marking “yes” does not guarantee approved participation in APP
- Developers need to be aware of APP eligibility to be coordinated with the PAs:
    - Yearly certification
    - APP developer cap

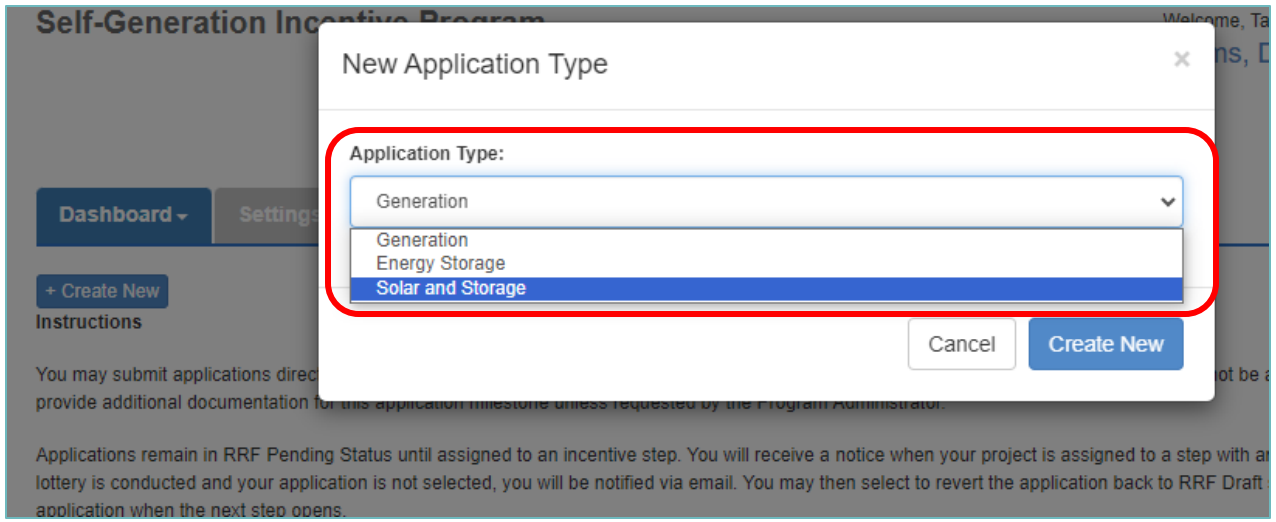
# Advance Payment Program Caps

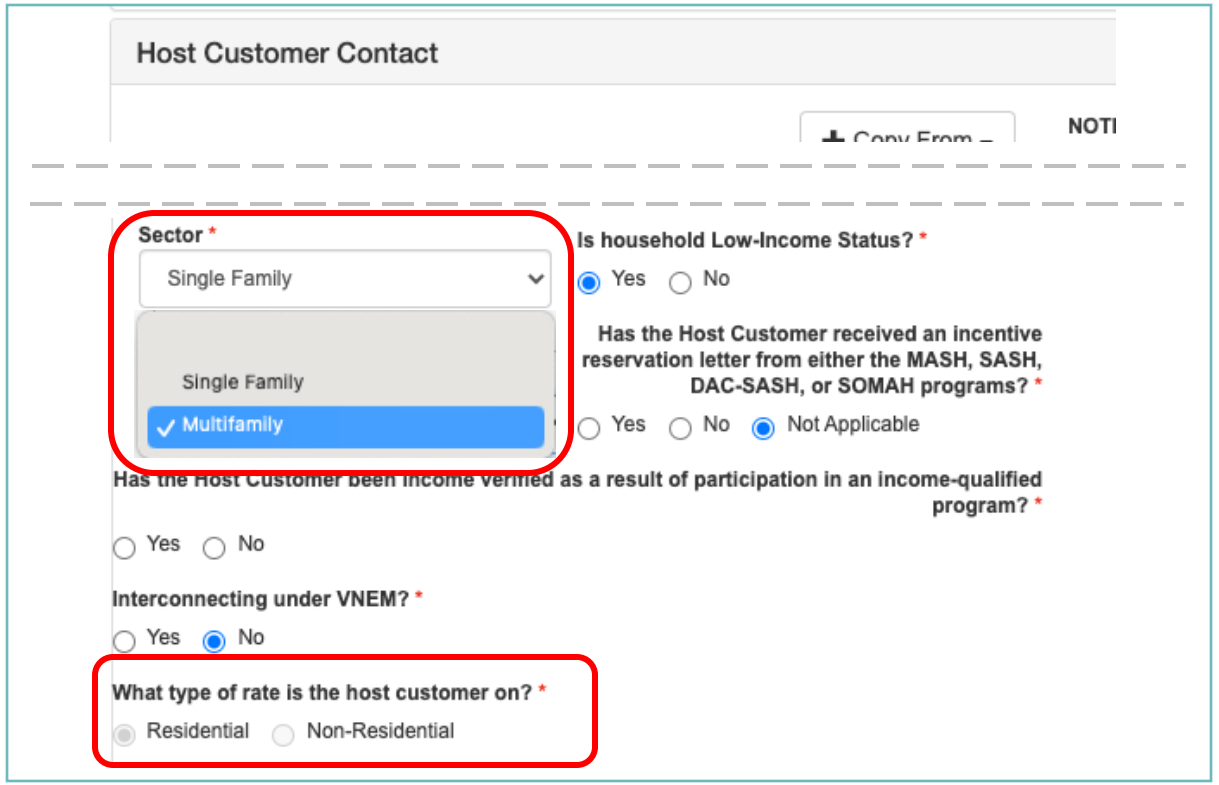
## Application caps logic



# Solar and Storage Application

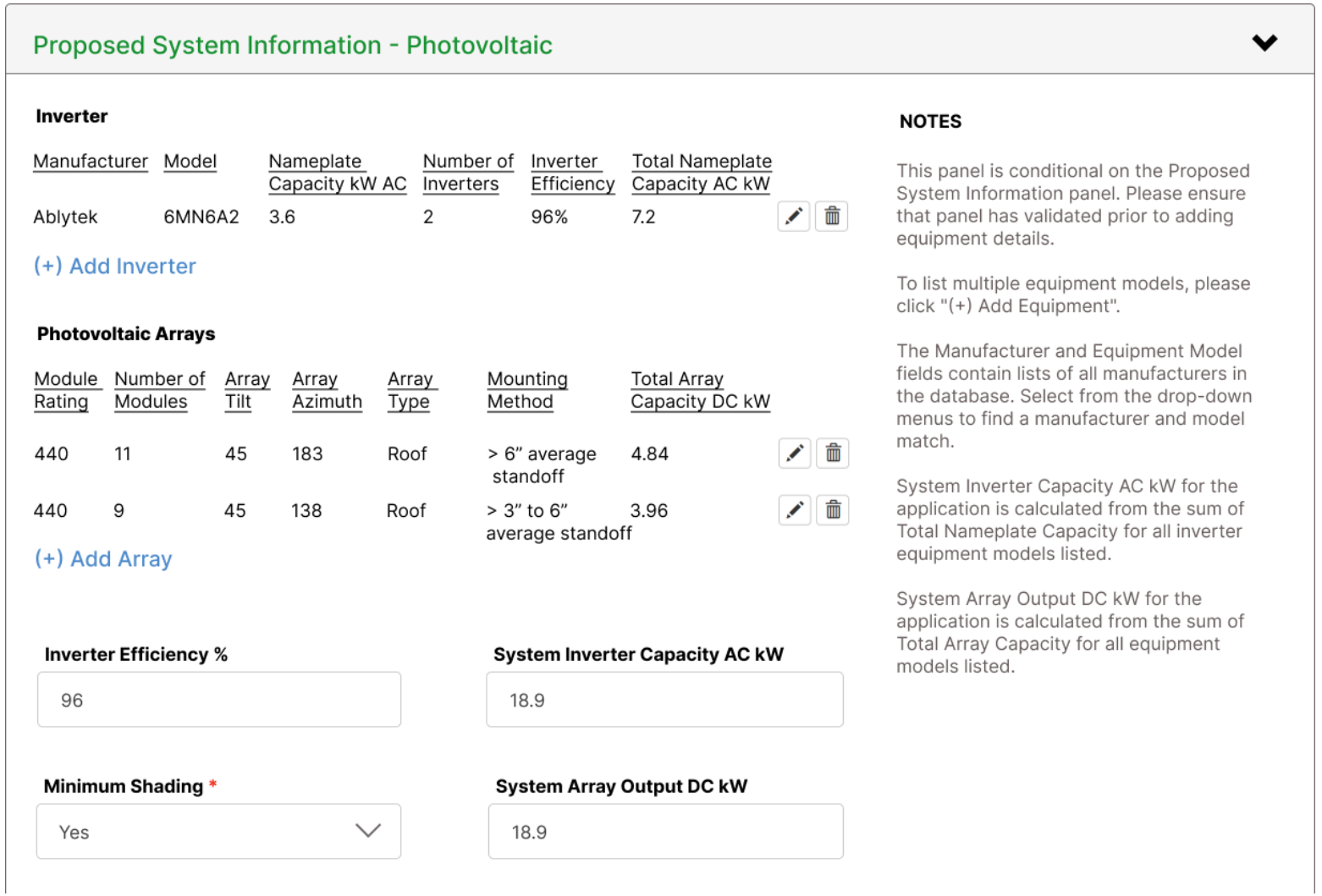
- Applicant will need to understand eligibility requirements to select this application type
- Some fields will be hidden as they are not applicable to customers who are eligible for this application
- Some fields will be auto-filled or options limited



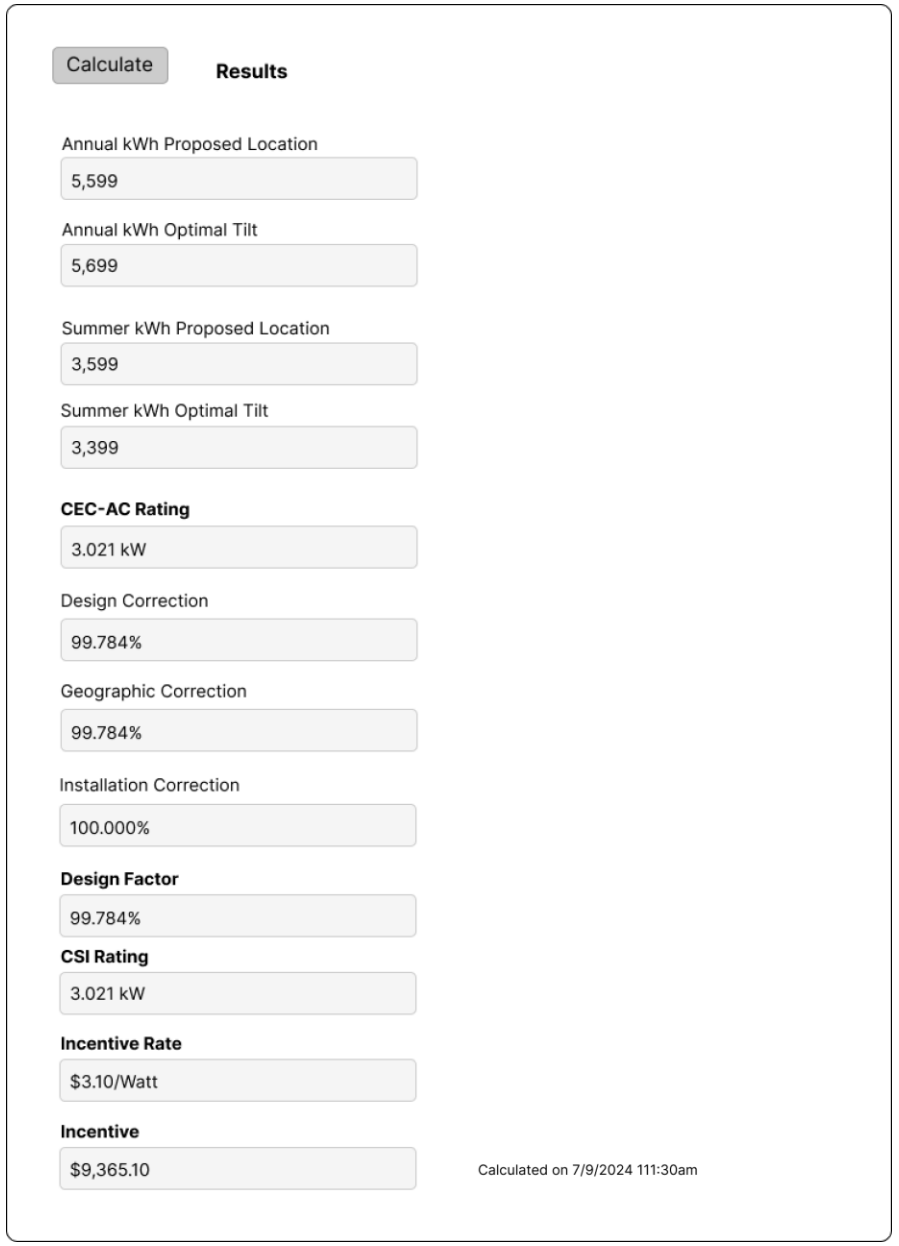
# Solar and Storage Application – *Proposed System Information (PV)*

- New panel for photovoltaic systems
- CEC Approved **Inverters**
  - Manufacturer
  - Model
  - Qty
  - Inverter Efficiency – Autofill
  - Nameplate capacity – Autofill
- CEC Approved **Modules**
  - Manufacturer
  - Model
  - Qty
  - Array Tilt
  - Azimuth
  - Array Type
  - Mounting Method
  - Array Capacity – Autofill
- Can handle up to 10 arrays



# Solar and Storage Application

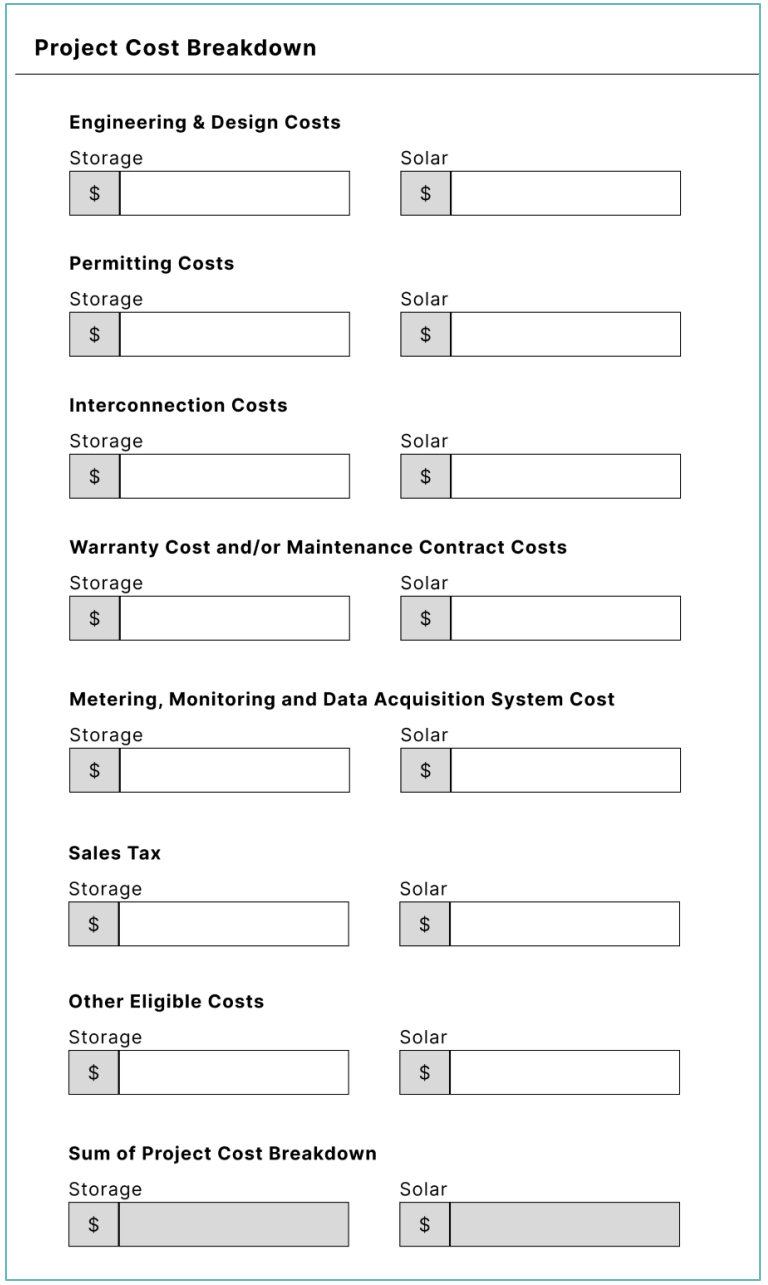
- New NREL PVWatts Integration
- Built in calculator
- Press *Calculate* button to retrieve instant results
- Calculates solar incentive
- Calculation timestamp



# Solar and Storage Application - *Project Costs Form*

Applicants will need to enter $ amounts separately for Solar and Storage:

- Project Cost Breakdown displayed at ICF
- Storage (TEPC) + Solar (TEPC) = Total Eligible Project Costs (TEPC)



**Project Cost Breakdown**

**Engineering & Design Costs**

Storage $ | Solar $

**Permitting Costs**

Storage $ | Solar $

**Interconnection Costs**

Storage $ | Solar $

**Warranty Cost and/or Maintenance Contract Costs**

Storage $ | Solar $

**Metering, Monitoring and Data Acquisition System Cost**

Storage $ | Solar $

**Sales Tax**

Storage $ | Solar $

**Other Eligible Costs**

Storage $ | Solar $

**Sum of Project Cost Breakdown**

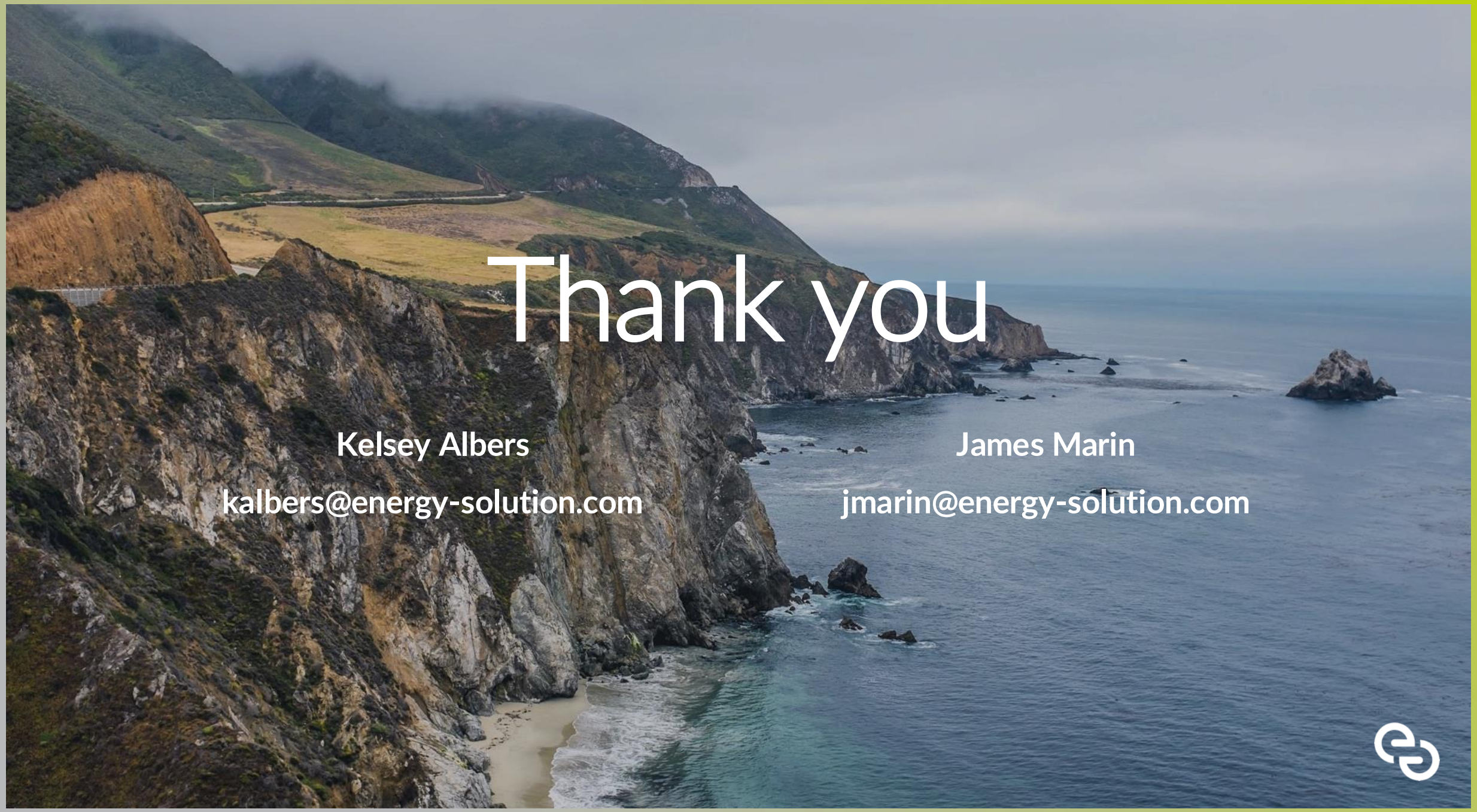
Storage $ | Solar $

# Solar and Storage Application - *Incentive Calculation*

- Blue - All new Solar incentive section
- Green - Modified Storage incentive section
- Purple – Combined incentive section

| Incentive Calculation (Solar) | Incentive Step: 6 | | | Solar Incentive Rate: $3.1 per Watt | |
|---|---|---|---|---|---|
| Base Equipment Incentive | | | | | $46,500.00 |
| **Max Equipment Incentive** | | | | a) | **$46,500.00** |
| **Other Incentives (Solar)** | **Total Dollars** | | | | **Impact on SGIP Incentive** |
| Other IOU Incentive | $45,000.00 | | | b) | $0.00 |
| Other Non-IOU Incentive | $1,500.00 | | | c) | $0.00 |
| Non-Ratepayer Incentive | $1,500.00 | | | | |
| Investment Tax Credit | $12,000.00 | | | | |
| **Adjusted Equipment Incentive** | | | | a+b+c = d) | **$46,500.00** |
| Total Other Incentives | e) $60,000.00 | | | | |
| **SGIP Incentive Adjustments (Solar)** | **Equipment Incentive +** | **Total Other Incentive** | **<= Incentive Cap(s)** | | **Incentive Adjustment** |
| Eligible Cost Cap (All Incentives) | $46,500.00 | $60,000.00 | $100,000.00 | f) | -$6,500.00 |
| Equipment Incentive | | | | g) | $40,000.00 |
| **Calculated SGIP Incentive (Solar)** | | | | | **$40,000.00** |

| Incentive Calculation (Storage) | Incentive Step: 6 | | | Storage Incentive Rate: $1.1 per Watt-hour | |
|---|---|---|---|---|---|
| **Reference Table** | **0-2 MWH** | **>2-4 MWH** | **>4-6 MWH** | | |
| 0-2 HOURS | 100% | 50% | 25% | | |
| 2-4 HOURS | 100% | 50% | 25.0% | | |
| 4-6 HOURS | 50% | 25.0% | 12.50% | | |
| | **0-2 MWH** | **>2-4 MWH** | **>4-6 MWH** | | |
| **Existing Onsite Equipment Off-Set** | 50,000 | - | - | | |
| 0-2 HOURS | 41,333 | - | - | | |
| 2-4 HOURS | 41,333 | - | - | | |
| 4-6 HOURS | 41,333 | - | - | | |
| Base Equipment Incentive | | | | | $113,666.67 |
| CA Manufacturer Adder | | | | | $22,733.33 |
| **Max Equiment Incentive** | | | | h) | **$136,400.00** |
| **Other Incentives (Storage)** | **Total Dollars** | | | | **Impact on SGIP Incentive** |
| Other IOU Incentive | $50,000.00 | | | i) | $0.00 |
| Other Non-IOU Incentive | $1,000.00 | | | j) | $0.00 |
| Non-Ratepayer Incentive | $1,000.00 | | | | |
| Investment Tax Credit | $22,000.00 | | | | |
| **Adjusted Equipment Incentive** | | | | h+i+j = k) | **$136,400.00** |
| Total Other Incentives | m) $74,000.00 | | | | |
| **SGIP Incentive Adjustments (Storage)** | **Equipment Incentive +** | **Total Other Incentive** | **<= Incentive Cap(s)** | | **Incentive Adjustment** |
| Eligible Cost Cap (All Incentives) | $136,400.00 | $74,000.00 | $100,000.00 | n) | -$110,400.00 |
| Equipment Incentive | | | | p) | $26,000.00 |
| **Calculated SGIP Incentive (Storage)** | | | | | **$26,000.00** |
| **Project Incentive Cap (All)** | **Solar SGIP Incentive +** | **Storage SGIP Incentive** | **<= Incentive Cap** | | |
| Project Incentive Cap | $40,000.00 | $26,000.00 | $5,000,000.00 | q) | $0.00 |
| Equipment Incentive (All) | | | | r) | $66,000.00 |
| **Calculated SGIP Incentive (Total)** | | | | | **$66,000.00** |


Thank you
Kelsey Albers
kalbers@energy-solution.com
James Marin
jmarin@energy-solution.com

# Database Changes

SELF-GENERATION INCENTIVE PROGRAM

Questions?

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SELF-GENERATION INCENTIVE PROGRAM

# Storage Sizing

*Ashley Pezikian, SoCalGas*
*Brian McAuley, Verdant*

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# Storage Sizing

SELF-GENERATION INCENTIVE PROGRAM

**Decision 24-03-071**
**Authorizes the SGIP PAs to submit a Tier 2 Advice Letter with a proposal to update energy storage system sizing requirements.**

- ***Goal:*** Update the current SGIP Handbook energy storage system sizing rules to be based on kilowatts-hour (kWh) to align with the current incentive structure of $/kWh.
  - The proposal should include:
    1. An energy storage system size cap that is based on energy storage capacity (kWh) rather than rated capacity (kW).
    2. PAs may also propose an overall incentive cap for SGIP energy storage projects (as part of the system sizing rules).

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# STORAGE SIZING FROM KW TO KWH IN THE SGIP

Q3 SGIP Quarterly Workshop 9/20/2024

VERDANT

## BACKGROUND

» Update storage cap from annual peak demand (kW) to something that reflects energy (kWh) of battery

» Incentives are currently paid on kWh – most program metrics are measured at kWh

» **This presentation is not intended to propose energy capacity caps, instead…**

- It offers lessons learned from 2023 SGIP storage performance data to help inform decisions the PAs and other stakeholders could take regarding a sizing cap.

» Analysis includes some prevalent battery sizes found in the SGIP in 2023 to inform discussion – all analysis is for average July weekdays (proxy for summer peak)

## SIZING CAP FROM THE LENS OF BATTERY CHARGE

Each option assumes PV is sized to load correctly w/ room to electrify

- **Option 1** – Total PV system generation during peak summer period
  - Size the battery to absorb all solar generation – not realistic but an upper bound
- **Option 2** – Total BTM consumption during peak summer period
  - Size the battery to customer underlying consumption during PV generating hours
  - Excess PV generation can be exported – not ideal
- **Option 3** – Total PV generation minus BTM consumption during peak summer period
  - Size the battery to absorb **excess PV generation not going to customer load**
    - Option would benefit customers on Net Billing Tariff (NBT)

## SIZING CAP FROM THE LENS OF BATTERY DISCHARGE

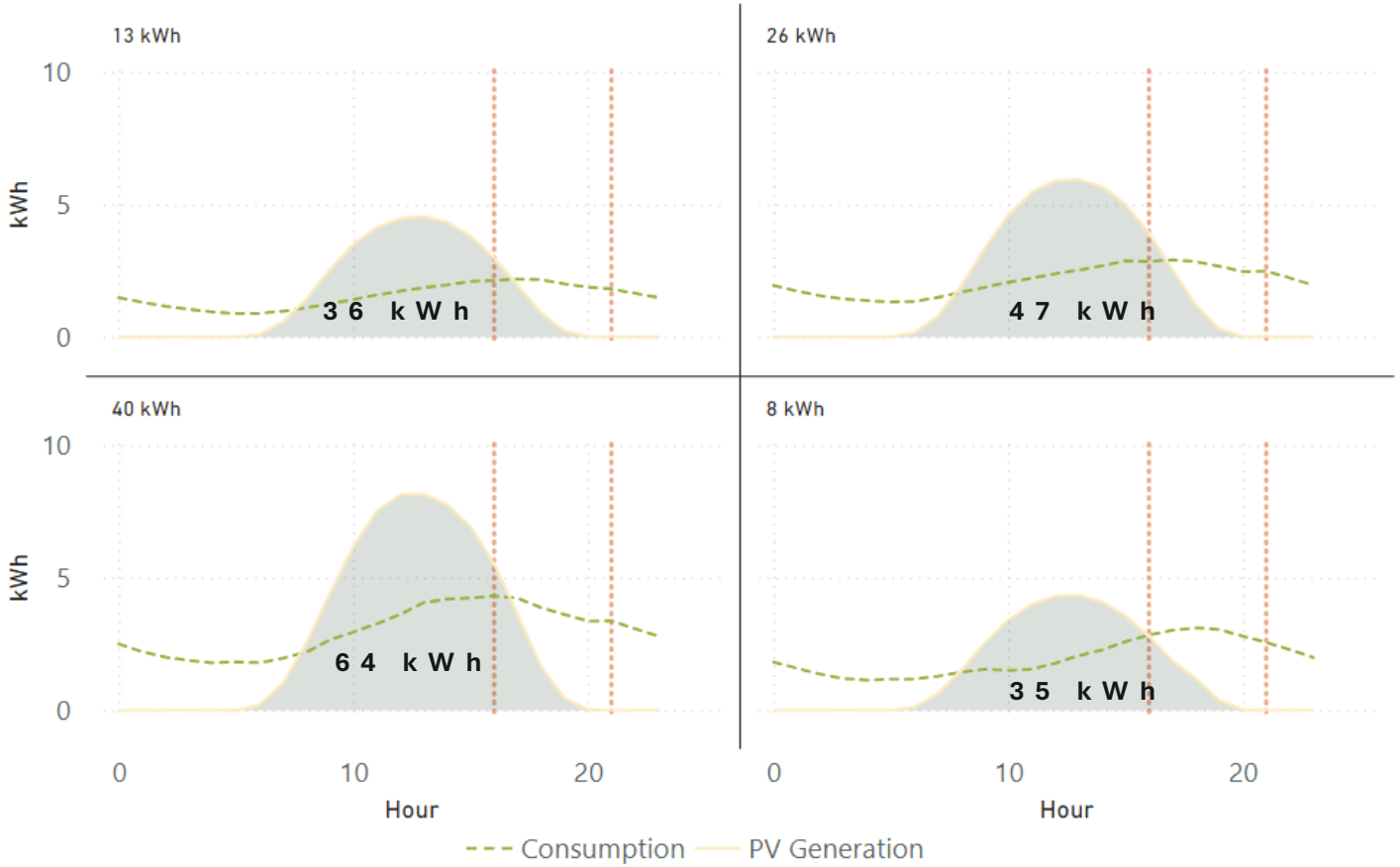
Each option assumes PV is sized to load correctly w/ room to electrify

- **Option 4 –** Discharge battery for total self-consumption during summer
  - Size the battery to zero out delivered imports – discharge only when load goes positive
  - Almost all discharge occurs outside PV generating hours
- **Option 5 –** Discharge battery only during 4-9pm hours during summer
  - Size the battery to discharge full customer BTM consumption *only* during 4-9pm
  - TOU arbitrage without export of excess storage capacity
  - Could add incremental capacity for export during emergency grid constrained hours
    - How to determine appropriate incremental capacity?

## OPTION 1 – SIZE TO PV GENERATION

By battery kWh observed in the SGIP (top left corners) during peak hours

- This assumes a battery with a SOC of 0% charged to 100%
- Battery absorbs all on-site PV
- Current SGIP kWh sizing – 23% to 63% of PV
- Not realistic – meant to represent a maximum bound

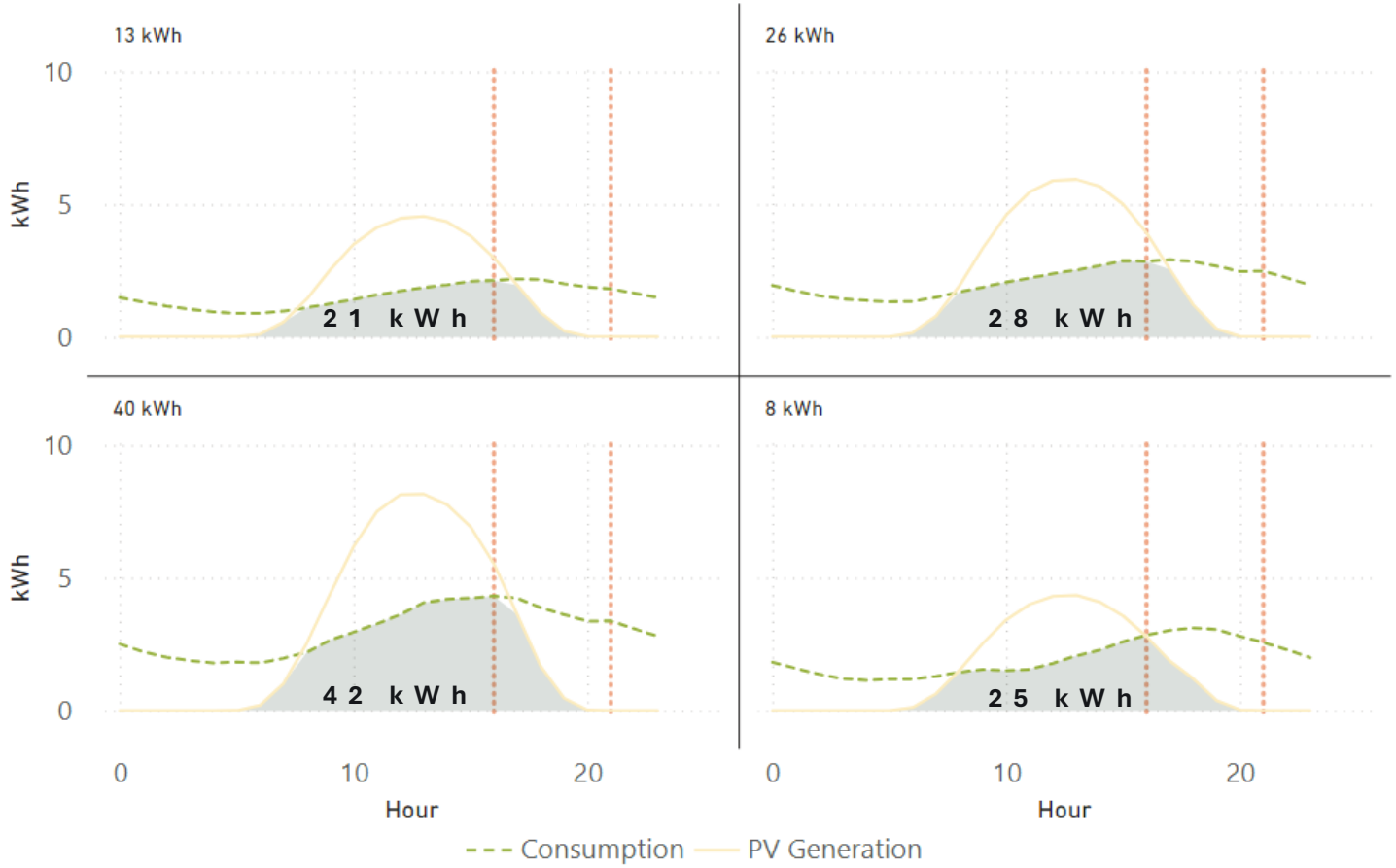



* Numbers correspond to shaded area

## OPTION 2 – SIZE TO CONSUMPTION

By battery kWh observed in the SGIP (top left corners) during peak hours

- Battery absorbs BTM consumption during PV hours
- Current SGIP kWh sizing – 32% to 95% of consumption during those hours
- Excess PV would be exported to the grid

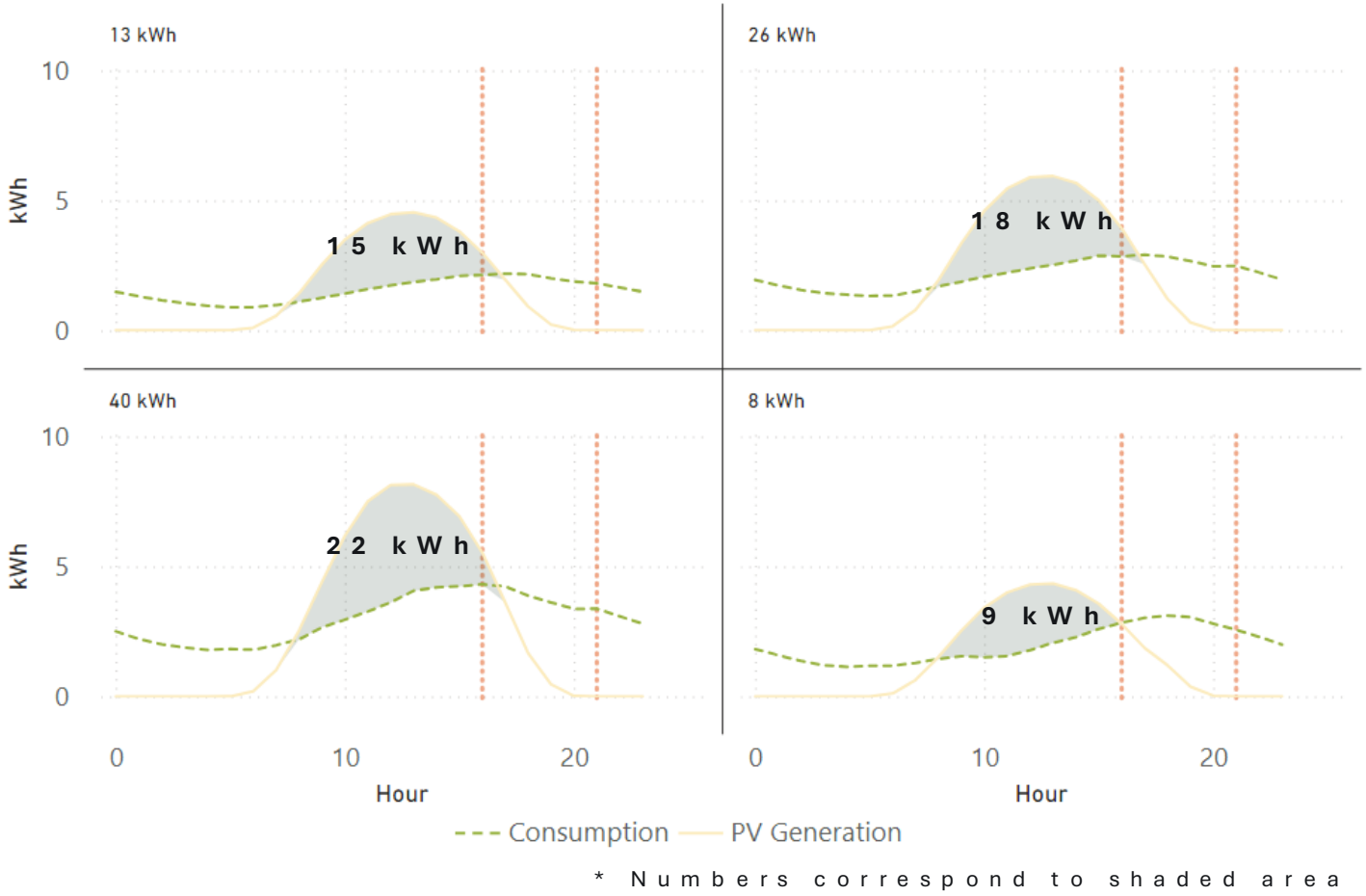



* Numbers correspond to shaded area

## OPTION 3 – SIZE TO PV *MINUS* CONSUMPTION

By battery kWh observed in the SGIP (top left corners) during peak hours

- Battery absorbs excess PV that otherwise would be exported under NEM
- Current SGIP kWh sizing – 89% to 180% of PV *minus* consumption during those hours
- Under NBT this would be advantageous behavior

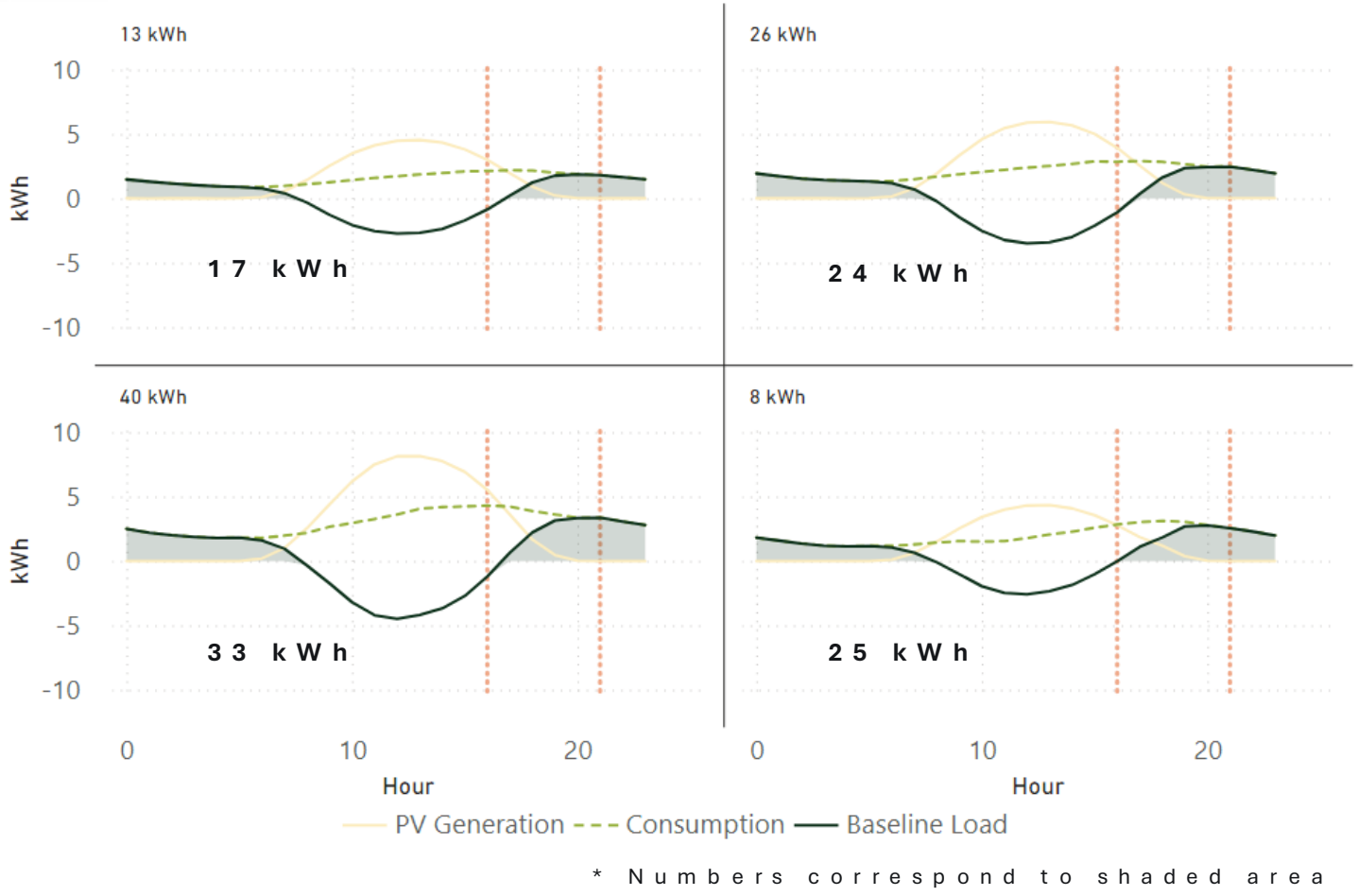



* Numbers correspond to shaded area

## OPTION 4 – SIZE FOR SELF-CONSUMPTION

By battery kWh observed in the SGIP (top left corners) during peak hours

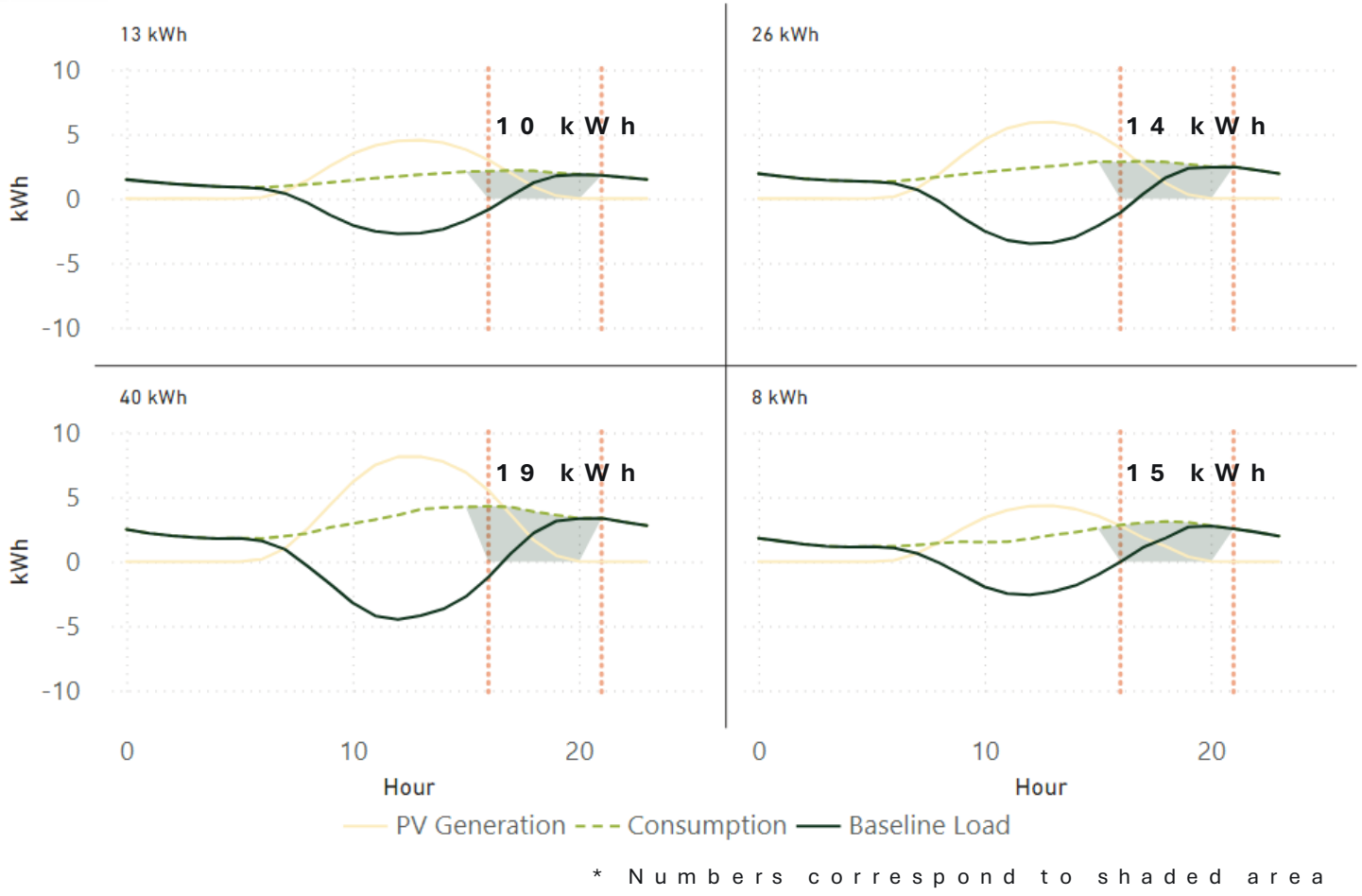
- Battery discharges to maintain net zero load throughout the day/evening
- Current SGIP kWh sizing – 32% to 121% of delivered load
- Some batteries are currently sized well for this option
- Customer resiliency key feature of this option



## OPTION 5 – SIZE FOR ON-PEAK DISCHARGE

By battery kWh observed in the SGIP (top left corners) during peak hours

- Battery discharges only during the 4-9pm peak
- Current SGIP kWh sizing – 53% to 211% of on-peak discharge
- TOU arbitrage without export



# THANK YOU

Brian McAuley
brian@verdantassoc.com

VERDANT

# Storage Sizing

SELF-GENERATION INCENTIVE PROGRAM

Questions?

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SELF-GENERATION INCENTIVE PROGRAM

# 3rd Quarter Workshop Q&A

*Sandi Linares-Plimpton, SoCalGas*

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SELF-GENERATION INCENTIVE PROGRAM

# Thank You for joining us today.

Program Administrator Contact Information
Southern California Edison Co. (SCE): sgipgroup@sce.com
Pacific Gas & Electric (PG&E): selfgen@pge.com
Southern California Gas Co. (SoCalGas): selfgeneration@socalgas.com
Center for Sustainable Energy (CSE): sgip@energycenter.org

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SELF-GENERATION INCENTIVE PROGRAM

# IRA Tax Credit Workshop

*Friday, September 20, 2024*

Southern California Edison, An Edison International Company
Pacific Gas and Electric Company
SoCalGas
Center for Sustainable Energy

# Agenda

SELF-GENERATION INCENTIVE PROGRAM

- Introduction
- Overview of IRA Tax Credit  - Alvin Lee, CPA
- IRA Tax Credit Discussion

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# Introduction

SELF-GENERATION INCENTIVE PROGRAM

- **D.24-03-071 Directive**
  - The Commission seeks to obtain more information on how to maximize the use of federal tax credits. Some of the topics to explore today  (1) how to maximize the Federal Cost Share of the SGIP project, including all costs categories potentially eligible for tax credits under the IRA such as solar, storage and panel upgrades (2) are third party owned solar and storage systems that enable low-income customers to host solar and storage with no or little money down available? (3) For residual costs to low-income customers on-bill finance and other finance mechanisms available?

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SELF-GENERATION INCENTIVE PROGRAM

# Overview of IRA Tax Credit

Alvin Lee, CPA and Partner at NOVOGRADAC

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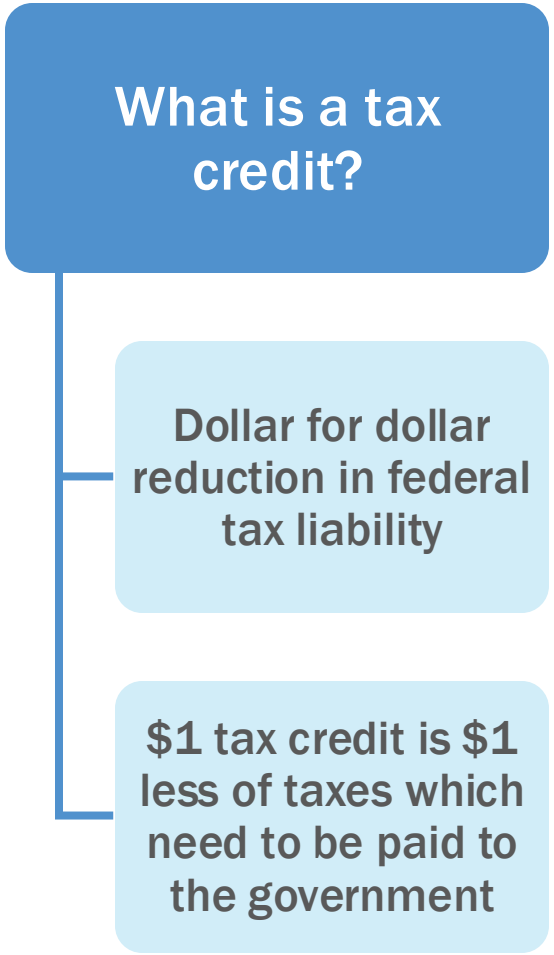
INTRO PART 1:

# Tax Credit Basics

# Tax Credits


What is a tax credit?
Dollar for dollar reduction in federal tax liability
$1 tax credit is $1 less of taxes which need to be paid to the government

# Renewable Energy Tax Credits

What credits are available for businesses?

**Investment Tax Credit**

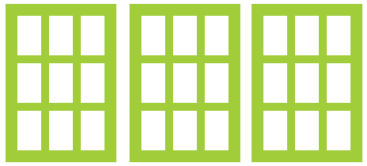
**(IRC Section 48)**

What credits are available to individuals?

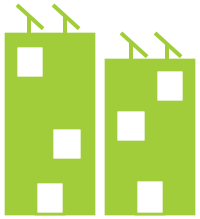
**Residential Clean Energy Credit**

**(IRC Section 25D)**

# Property Eligible for the ITC



Microgrid Controllers



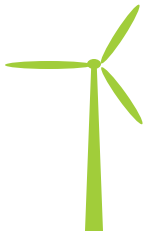
Solar Energy Property

Fuel Cells

Combined Heat and Power Systems

Waste Energy Recovery Property

Equipment which uses ground or ground water as a thermal energy source



Small Wind (turbines less than 100kW)

Qualified Microturbine Property

Energy Storage

INTRO PART 2:

# Inflation Reduction Act For Individuals

# Residential Renewable Energy Tax Credit

## Eligible Property

- Solar Photovoltaics
- Solar Water Heat (must be certified by Solar Rating Certification Corporation)
- Fuel Cells using Renewable Fuels (maximum credit of $500 per half kilowatt of capacity)
- Wind (Small)
- Geothermal Heat Pumps (must meet Energy Star program requirements)
- Battery Storage (minimum capacity of 3kilowatt hours)

# Residential Renewable Energy Tax Credit

**30%** for systems placed in service after 12/31/2021 and before 01/01/2033

**26%** for systems placed in service after 12/31/2032 and before 01/01/2034

**22%** for systems placed in service after 12/31/2033 and before 01/01/2035

# Qualified Battery Storage Technology Expenditure

A credit available for battery storage if:

- Installed in connection with a "dwelling unit" in the United States that is being used as a residence by the taxpayer
  - A dwelling unit has one or more rooms for sleeping, cooking, and toilet facilities
  - Mobile homes and boats can qualify as dwelling units as well
- Has a capacity over 3 kilowatt hours

# Example

You install a $50,000 solar panel system in your dwelling unit that you use as a residence.

- If installed in 2022, your credit is 30% of the $50,000 cost. Resulting in a credit of $15,000.

- If installed in 2033, your credit will be only 26% of the expenditure. Resulting in a credit of $13,000.

# Residential Renewable Energy Tax Credit

## Special Rules

- Cost of labor to install, piping or wiring to interconnect property are eligible
- Cost of solar panels or other property installed as a roof are not eligible
- Cost related to swimming pools, hot tubs are not eligible
- Contributed costs by tenant-stockholder at a cooperative housing corporation are eligible for proportionate share
- Contributed costs by member of a condominium are eligible for proportionate share
- If less than 80 percent of the use of an item is for nonbusiness purposes, only that portion of the expenditures for such item which is eligible

# Residential Renewable Energy Tax Credit

## Other tax considerations

- Tax credit is claimed on IRS Form 5695
- Credits are nonrefundable and unused credits are carried forward to the next year
- Credits are treated as paid when the original installation of the item is completed
- If the cost is in connection with the construction or reconstruction of a structure, it will be treated as made when the original use of the constructed or reconstructed structure by the taxpayer began
- Rebates or subsidies received and are not included in the taxpayer's gross income (non-taxable) will reduce the eligible cost of the system when calculating the credit
  - Also applies if a third party (e.g. contractor) receives the rebate or subsidy on behalf of the taxpayer
- Production based incentives (i.e. SGIP program) may not be considered a rebate or incentive based on cost. Individual taxpayers should consult their tax advisors

INTRO PART 3:

# Inflation Reduction Act For Businesses

# Breaking Down the IRA

## Changes to Rates & Rules

- PTC
- ITC
- IRC Sections 48(E) & 45(Y)

## New Credits & Technologies

- Interconnection Costs
- ITC Hydrogen
- Clean Fuel Production Credit
- ITC – Microgrid Controllers
- ITC – Offshore Wind
- ITC – Stand Alone Storage
- Carbon Oxide Capture
- PTC – Solar

## Adders & Bonuses

- Apprenticeship Requirements
- Prevailing Wage Requirements
- Domestic Content
- Low-Income & Energy Communities

## Monetization

- Transferrable Credits
- Elective Pay

# PTC/ITC Extension

## Old Rules

60% PTC for wind facilities that start construction before 1/1/22

ITC-Solar: 30%, 26%, or 22% for energy property depending on when construction began; drops to 10% for project placed in service starting in 2026

## New IRA Rules

Extension of ITC for facilities starting construction after 1/1/22 and before 1/1/25

ITC @ 30% (labor and prevailing wage requirements) PTC in lieu of ITC for Solar

After 2024: ITC transition to technology neutral production for facilities that start construction by the end of 2032.

| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Credit Prior to IRA | 26% | 22% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Credit Under IRA | 30% | 30% | 30% | 30% | 30% | 30% | 30% | 30% | 30% | 30% | 30% | 26% | 22% | 0% |

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# ITC Effective Dates & Phasedown

**26%** — Beginning of Construction ("BOC") in 2020 or 2021 and PIS in 2020 or 2021

**30%** — PIS in 2022 regardless of when construction commenced

**Adders/ Bonus** — New Rules noted on prior slide

- In full effect for projects PIS after 1/1/2023 and construction commences prior to 2025
- 6% Base; Up to 70% with bonus adders

**Tech Neutral** — ITC under 48(E)

- Applies to projects PIS after 2024 and to any electricity generating facility with a zero or less greenhouse gas emissions rate
- Phased out over four years after 2032 or when annual gas emissions from electricity production in the US have been reduced by 75% of 2022 level.

# New Credits and Eligible Technologies

| | |
|---|---|
| **New Credits** | IRC Section 48E (Clean Electricity Investment Credit) |
| | IRC Section 45V (Clean Hydrogen PTC) |
| | IRC Section 40B (Sustainable Aviation Fuel Credit) |
| | IRC Section 30C (Alternative Fuel Vehicle Refueling Property Credit) |
| | IRC Section 45Y (Clean Energy Production Credit) |
| **New Eligible Property Under Section 48** | Standalone Energy Storage Property |
| | Interconnection Property (output not greater than 5MW AC) |
| | Qualified Offshore Wind Facilities |
| | Qualified Microgrid Controllers |

# ITC Adders and Bonus Credits


**6%**
base ITC

**30%**
if prevailing wage and apprenticeship requirements are met

**+ 10%**
if domestic content criteria satisfied

**+ 10%**
if facility is in an "Energy Community"

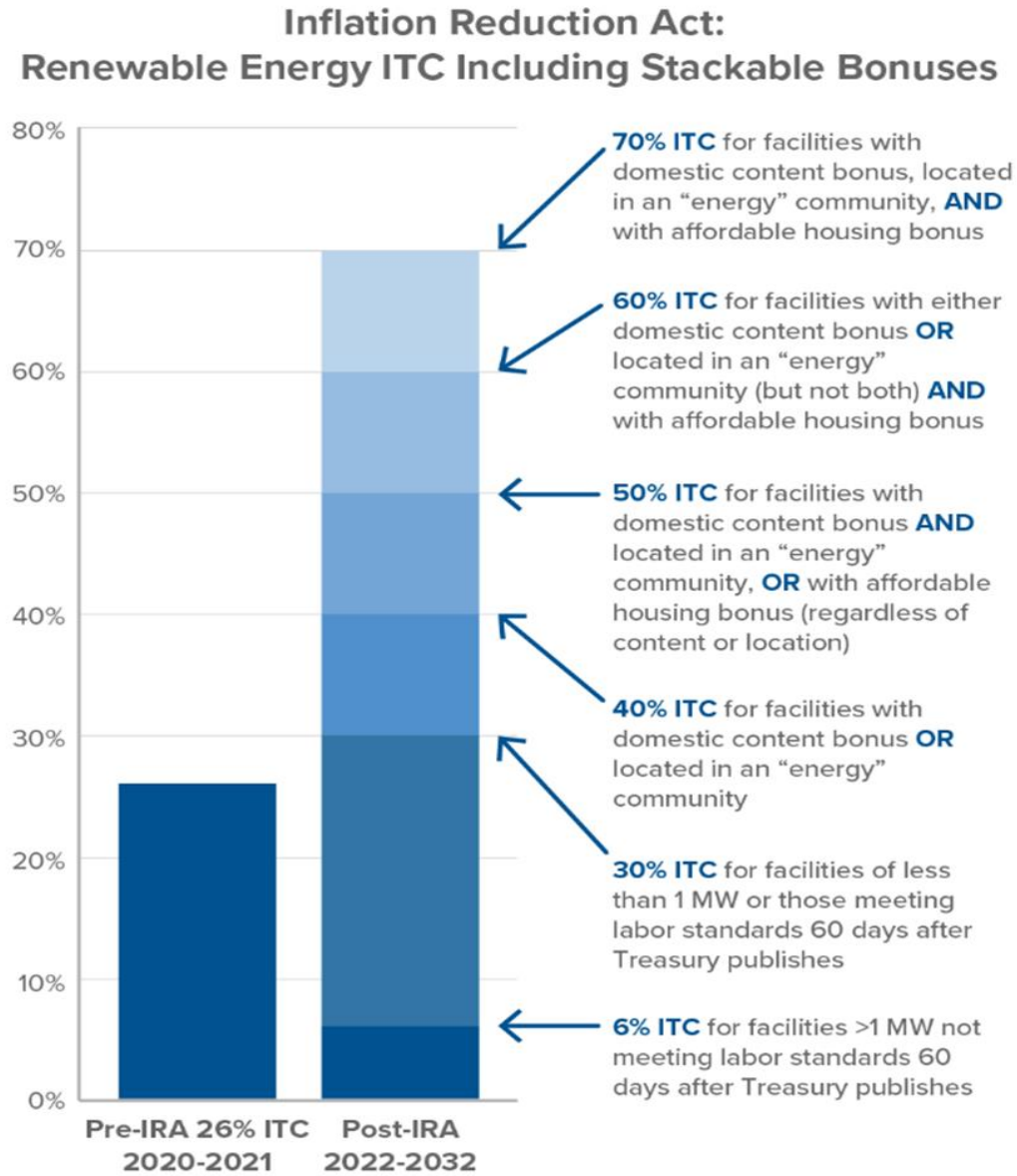
**+ 10%**
if in a low-income community or on Indian land;

***OR***

**+ 20%**
if at a qualified low-income residential building, or a qualified LI economic benefit project

Up to **70%** ITC available if meeting all bonus requirements

# ITC Adders and Bonus Credits



# Definitions

## Prevailing Wage Requirement

- Written certification that laborers and mechanics are paid "prevailing wages" for locality during construction and for repairs/altercations after PIS during recapture/credit period

## Apprenticeship Requirement

- The "applicable percentage" of total labor hours for construction, altercation or repair work is done by qualified apprentices
- Employee participates in an apprenticeship program under the National Apprenticeship Act

## Domestic Content

- Credit booster for facilities composed of steel, iron, or produces manufactured in the U.S.

## Energy Community

- A census tract with less than 5% oil/gas employment or a tract where a coal mine has closed

## Environmental Justice

- Effective starting in 2023
- Only available for solar and wind
- 10% or 20% depending on location
- Maximum net output must be less than 5 MW (AC)

# Low-Income Communities

- 10 or 20 percent credit booster for a facility located within a low-income community or Indian (10%) or are part of a qualified low-income residential building project" or "qualified low-income economic benefit project" (20%).
- Applicant registration via DOE portal is required, project maturity documentation will need to be uploaded.
- Bonus credit cannot be claimed if facility is placed in service prior to an allocation being awarded.
- Solar and wind energy facilities that have a maximum output of less than 5 megawatts (AC) qualify.
- IRS will allocate up to 1.8 gigawatts of eligible solar and wind capacity per year.

# Low-Income Communities Bonus Credit Program 2024 Capacity Limitation

| ELIGIBILITY DESCRIPTION | CATEGORY OR SUB-RESERVATION | TOTAL 2024 CAPACITY AVAILABLE INCLUDING 2023 ROLLOVER (IN MEGAWATTS) |
|---|---|---|
| **Category 1:** Located in a Low-Income Community<br><br>800 megawatts to facilities located in low-income communities | • **1a:** Eligible Residential Behind-the-Meter (BTM)<br>• **1b:** Eligible Residential Behind-the-Meter (BTM) – Additional Selection Criteria<br>• **1c:** Other Facilities<br>• **1d:** Other Facilities – Additional Selection Criteria | • 250<br>• 250<br><br>• 100<br>• 200 |
| **Category 2:** Located on Indian Land<br><br>200 megawatts to facilities located on Indian lands | • **2a:** Located on Indian Land<br>• **2b:** Located on Indian Land – Additional Selection Criteria | • 100<br>• 100 |
| **Category 3:** Qualified Low-Income Residential Building Project<br><br>224.8 megawatts to facilities that are part of federally-subsidized residential buildings | • **3a:** Qualified Low-Income Residential Building Project<br>• **3b:** Qualified Low-Income Residential Building Project – Additional Selection Criteria | • 100<br>• 124.8 |
| **Category 4:** Qualified Low-Income Economic Benefit Project<br><br>900 megawatts to facilities where at least 50 percent of the financial benefits of the electricity produced go to households with incomes below 200 percent of the poverty line or below 80 percent of area median gross income | • **4a:** Low-Income Economic Benefit Project<br>• **4b:** Low-Income Economic Benefit Project – Additional Selection Criteria | • 400<br>• 500 |
| **TOTAL** | | • **2124.8** |

# Low-Income Communities – Category 1 & 2 (+10%)

## Category 1

Low-income community is defined as any population census track if the poverty rate for such tract is at least 20 percent based on the American Community Servey (ASC) low-income community data currently used for the New Markets Tax Credit (NMTC).

## Category 2

A facility is a Category 2 Facility if it is located on Indian land. The term Indian land is defined in section 2601(2) of the Energy Policy Act of 1992 (25 U.S.C. 3501(2)).

# Low-Income Communities – Category 3 (+20%)

## Category 3

The financial benefits of the electricity must be allocated equitably among the occupants of a qualified residential property, which can be either a multifamily rental property or single-family rental property.

At least half of the financial value of the energy produced by the facility must be equitably allocated to the property's low-income occupants under the covered housing program or other affordable housing program.

# Low-Income Communities – Category 3 (+20%)

1) Allocated via utility bill savings
2) One of the methods described in the HUD guidance. Some examples of benefits that can be provided to tenants are:
    - Job training and workforce development,
    - Facility upgrades,
    - Wellness programs or services,
    - Free or reduced cost for high-speed internet service,
    - Job training and workforce development,
    - Financial literacy programs and services,
    - Community events and/or support for resident associations,
    - Additional support staff, or
    - Shuttle services.

# Low-Income Communities – Category 4 (+20%)

Category 4

1) Serve multiple qualifying low-income households with income less than 200% of the poverty line or below 80% of area median gross income (qualifying household),
2) Have at least half of the facility's total output in kilowatt must be assigned to qualifying households, and
3) Provide each qualifying household a bill credit discount rate of at least 20%.

# Low-Income Communities – Category 4 (+20%)

$$\frac{\text{Financial benefit provided to a qualifying household} - \text{All payments made by the qualifying household to the facility owner and any related third parties as a condition of receiving that financial benefit}}{\text{Financial benefit distributed to the qualifying household}} = \text{Bill credit discount rate}$$

*Source: Novogradac*

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$$\frac{\text{Financial benefit provided to a qualifying household}}{\text{Total value of the electricity produced by the facility and assigned to the qualifying household}} = \text{Bill credit discount rate}$$

*Source: Novogradac*

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# Prevailing Wage & Apprenticeship

For projects that began construction after **January 29, 2023**, a 30% ITC is only available if:

The project has a maximum net output of less than 1 MW(AC), *or*

Newly enacted prevailing wage and apprenticeship requirements are satisfied.

# Prevailing Wage & Apprenticeship

## PREVAILING WAGE REQUIREMENT (ITC):

Laborers and mechanics (both contractors and subcontractors) must be paid wages at prevailing rates as determined by the Secretary of Labor. Applies to the construction, alteration, and repair of the facility (for five years). After-the-fact correction is allowed with a payment of the difference, interest, and penalty of $5,000 per person.

# Prevailing Wage & Apprenticeship

## APPRENTICESHIP REQUIREMENT:

Certain percentages of total labor hours for construction, alteration or repair work on the qualified facility must be performed by qualified apprentices. 10% in 2022; 12.5% in 2023; 15% in 2024 and beyond. State apprenticeship ratio laws must also be followed. Penalty is $50 multiplied by all labor hours logged during non-compliance period. However, a good faith effort to comply satisfies the requirement.

# Domestic Content

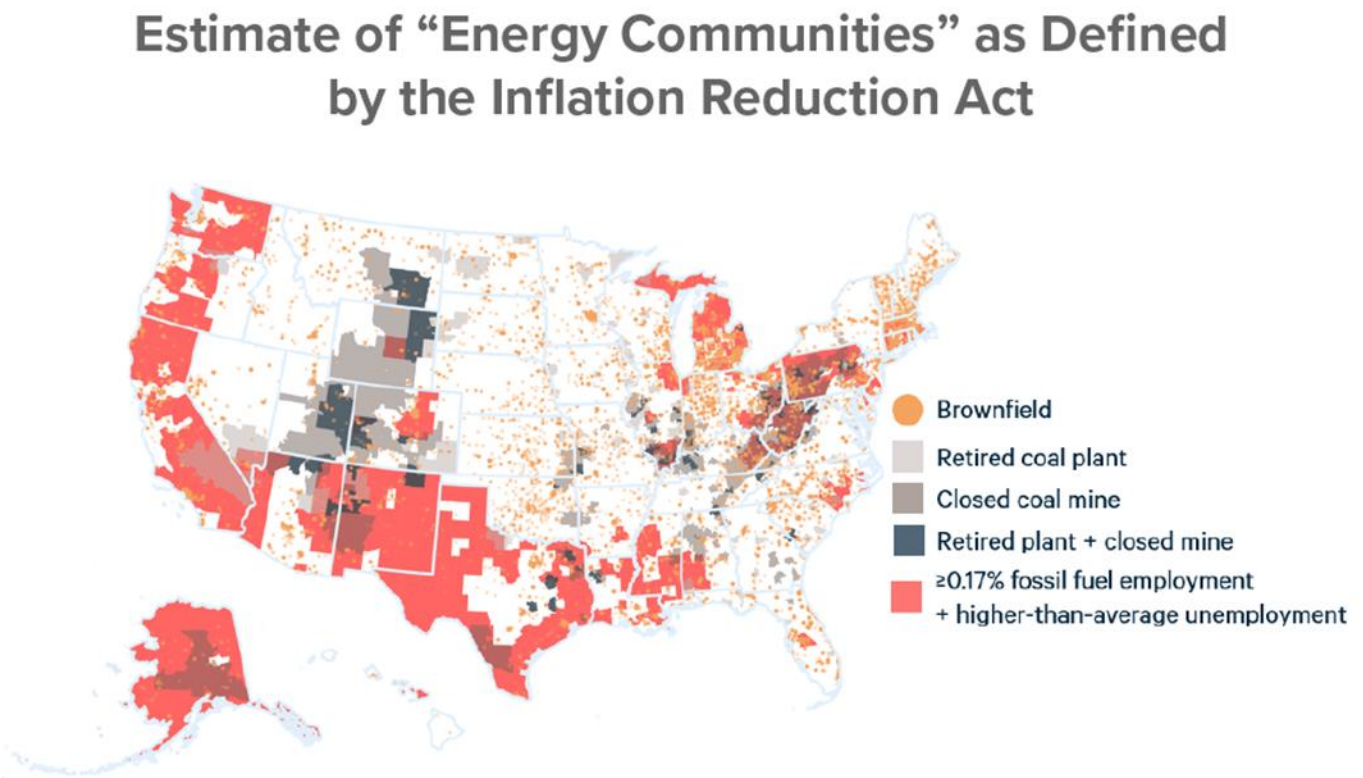
## Credit booster for facilities composed of steel, iron, or produces manufactured in the U.S.

### Required Percentages of Domestic Content Vary by Construction Start Date

| If Construction begins... | Before 1/1/25 | 1/1/25 - 12/31/25 | 1/1/26 - 12/31/26 | 1/1/27 - 12/31/27 | On or after 1/1/28 |
|---|---|---|---|---|---|
| | 2024 | 2025 | 2026 | 2027 | 2028 |
| Required % of Domestic Content | 40% | 45% | 50% | 55% | 55% |
| Required % of Domestic Content for Offshore Wind | 20% | 27.5% | 35% | 45% | 55% |

# Energy Community

Credit booster for a facility located in a census tract with less than 5% oil/gas employment or a tract where a coal mine has closed




*Source: Resources for the Future; Novogradac*

# Transferrable Credits

| | |
|---|---|
| **What is it?** | Eligible taxpayers can transfer eligible credits to unrelated taxpayers |
| | Effective for facilities placed in service after 2022 |
| | Cash payment is not taxable income to transferor and not deductible to transferee |
| **Limitations** | Must be transferred for cash |
| | Not available to tax-exempts |
| | Cannot be transferred more than once |
| | Carryforwards and carrybacks cannot be transferred |
| | Transferability is not available to individual taxpayers |

# Direct Pay

| | |
|---|---|
| **What is it?** | Taxpayers can claim credits as a cash refund treating credits as taxes already paid |
| | Effective after 12/31/22 |
| **Limitations** | Only available to entities exempt from tax and government entities |
| | Penalties if Domestic Content is not satisfied (waiver may be available) |

# Direct Pay – Other Provisions

## Applicable Entities

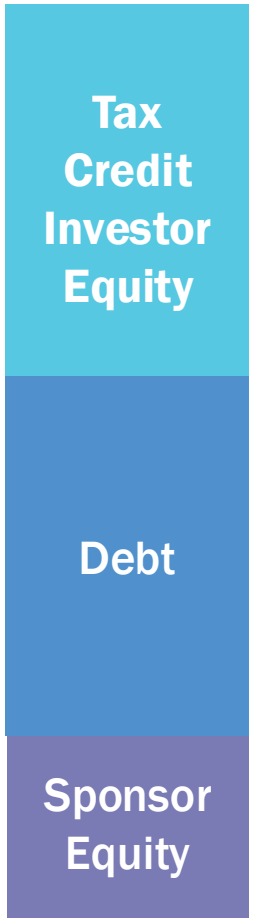
- Nonprofit organizations
- State and local governments
- Native American tribes
- Tennessee Valley Authority
- Alaska Native Corporations

- **For-profit entities are also eligible for 45Q Carbon Sequestration, 45V Clean Hydrogen, and 45X Advanced Manufacturing credits only through 2032**

## Elective Provision

- Due date for tax filing entities:
  - **Due date (including extensions) of tax return**
  - **No earlier than 180 days after August 18, 2022**
- Awaiting guidance from Treasury for government and political subdivisions on how election and payment request will be made
- **Filed for the year in which the property is placed in service**
- Important timing considerations and revocation rules to factor into decision

# What Does Tax Equity Provide




## Tax Credit Investor Equity

- Initial capital contribution sized based on present value of future expected benefits, discounted back at hurdle rate
- May be reflected as a price per credit allocated
- Portion of equity contributed at close and during construction. Majority at substantial completion of placed-in service date
- Preferred return typically required in order to receive “cash on cash” return / economic return

# What Does Tax Equity Receive

## Tax Credits

- Up to a 99% allocation

## Cash

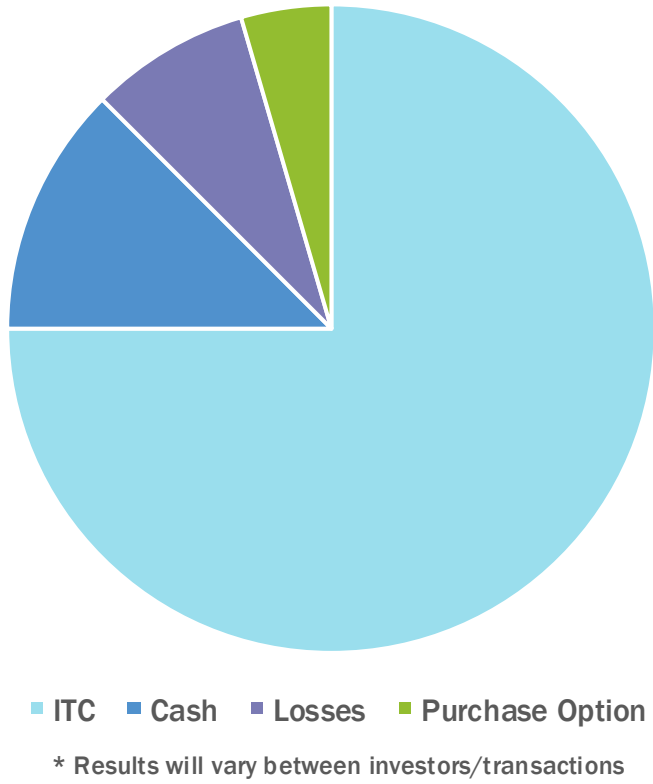
- Preferred Return
- Residual Allocations

## Losses (depreciation)

- Capital Account Limitations

## Purchase Option Proceeds

Return Composition (ITC transaction) *




* Results will vary between investors/transactions

SELF-GENERATION INCENTIVE PROGRAM

# IRA Tax Credit Discussion

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# IRA Tax Credit Discussion

SELF-GENERATION INCENTIVE PROGRAM

- **PA Advice Letter Goals (D. 24-03-071)**
  - How to maximize the Federal Cost Share of the SGIP project (including all costs categories potentially eligible for tax credits under the IRA such as solar, storage and panel upgrades)
  - Are third party owned solar and storage systems that enable low-income customers to host solar and storage with no or little money down available?
  - For residual costs to low-income customers finance mechanisms available?

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# IRA Tax Credit Discussion

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***Customer-Owned Systems and Customer Receives the SGIP Incentive:***

In what situation (Low-income considered) would this be more beneficial for a customer over a lease or Power Purchase Agreement (PPA)?

In what situations has industry been made aware of customers not receiving the full tax credit, as it was indicated on the SGIP application?

What financing mechanisms are available to low-income customers to carry the Federal Tax Credit share of the project until the tax credit is received?

What SGIP rule changes would industry support/not support to maximize the Federal Tax Credit Share of the SGIP project in this scenario?

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# IRA Tax Credit Discussion

SELF-GENERATION INCENTIVE PROGRAM

***Developer-Owned Systems and Developer Receives the SGIP Incentive:***

Do all Developers have lease or PPA options that enable little-to-no money down for the installation of storage and/or solar? Do the Developers claim the tax credit in these circumstances?

In what situation (Low-income considered) would a lease or PPA be more beneficial for a customer over a customer-owned system?

In this scenario, are developers able to maximize the 30% tax credit and/or receive IRA tax credits in excess of 30%? Why or why not?

If a lease or PPA option is available, should this be a preferred solution for low-income customers participating in SGIP?

What SGIP rule changes/proposals would industry support/not support to maximize the Federal Tax Credit share of the SGIP project in a lease or PPA scenario?

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# IRA Tax Credit Discussion

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**Additional Questions:**

- Overall, is there a reason a tax credit should not be considered for residential SGIP customers installing storage and/or solar? Why or why not?
- What other SGIP issues or barriers should be considered relative to IRA Tax Credits?
- What other SGIP rule changes/proposals (if any) would industry support/not support to maximize the Federal Tax Credit share of the SGIP project?

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# Thank you

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