



Staff Report Item 4

TO: Ava Community Energy Executive Committee

FROM: Kelly Brezovec, Director of Account Services
Jin Ruan, Energy Analyst - Financial Modeler

SUBJECT: Solar Billing Plan Policy recommendations

DATE: November 1, 2023

Recommendation

Receive an update on staff policy recommendations for the Solar Billing Plan (SBP), also known as Net Billing Tariff (NBT). Provide feedback in advance of policy going to the full board for a vote in November.

Background

Ava Community Energy regulatory staff has been tracking the NEM 2.0 successor tariff and presented on major developments at the [December 2022 Board of Directors meeting](#). Staff returned to the [September 2023 Board of Directors meeting](#) to provide a history of the NEM tariffs and the Net Billing Tariff, with an intention to return with Ava-specific data and a proposal for implementation.

Net Billing Tariff (NBT) is the successor to NEM 2.0. Rather than receive the retail rate for generation that is exported to the grid, customers receive compensation at a new Avoided Cost Calculation (ACC) rate, also called the Energy Export Credit (EEC). The ACC is a tool used by the California Public Utility Commission (CPUC) to determine the value of onsite solar and other distributed energy resources. The ACC varies by the hour and the month. Spring and summer mid-day ACC compensation rates are the lowest while late summer early evening prices are the highest. ACC pricing is aligned with historic California Independent System Operator, or CAISO, energy demand and availability.

The policy proposed by the CPUC, adopted by PG&E, includes a “glidepath” for new residential SBP customers, which provides an adder, or increase, to the established ACC for new solar customers who

are voluntarily installing solar with larger adders for CARE or FERA customers. Residential new construction is required per State building code to install solar and will not receive the Energy Export Bonus Credit, as these are “involuntary” system installations. The glidepath uses a vintage-like system with customers receiving their adder for nine years. The glidepath adder under the base SBP plan is called the **Energy Export Bonus Credit**. Note that the glidepath does not apply to non-residential customers.

Table 1: Energy Export Bonus Credits (SBP Glidepath)

	Residential \$/kWh	Low Income \$/kWh
2023	\$0.022	\$0.090
2024	\$0.018	\$0.072
2025	\$0.013	\$0.054
2026	\$0.009	\$0.036
2027	\$0.004	\$0.018

Implementation Schedule

There are two groups of customers that will initially be eligible for SBP:

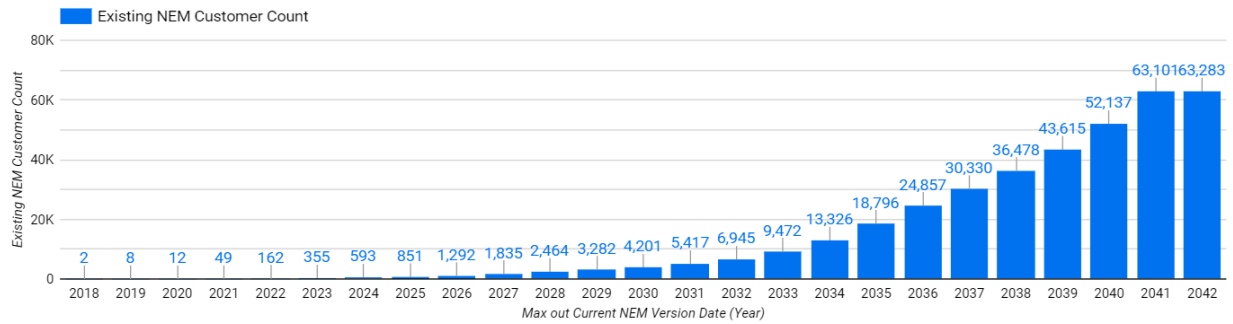
1. Customers that completed their self-generation application after April 14, 2023 will be automatically placed on SBP.
2. Customers that have completed 20 years on NEM 1.0, and eventually 20 years on NEM 2.0, will transition to SBP at their next PG&E delivery true-up.

Given the complexities of this new tariff, PG&E’s billing systems are not ready to bill on SBP. PG&E expects to have their residential SBP operations ready by December 2023 and non-residential prepared by July 2024. Once the billing systems are ready, customers will transition to SBP based on their PG&E delivery true-up date or interconnection date.

Existing NEM customers will remain on their current tariff until they have reached their 20-year legacy period.

For reference, figure 1 depicts the movement from our existing NEM customers to the new Solar Billing Plan tariff, based on the 20-year legacy period. Ava will not see the majority of our current NEM customers transition to SBP until 2037.

Figure 1: Charting Ava customers' transition dates, NEM 1.0 and 2.0 to Solar Billing Plan



Ava SBP Policy Proposal

Staff proposes to implement SBP, largely mirroring PG&E’s structure - with three major differences as listed below and followed by additional detail.

1. Peak load management compensation
2. CARE/FERA export adder
3. Peak hours export adder

First, SBP lends itself to paired solar and storage installations, as the customer can use their own excess energy later in the evening. Ava staff is exploring program opportunities to compensate customers with a capacity-based payment based on the size of the customer’s battery for storage use that is aligned with our peak, and is able to flex with price signals provided by Ava. This program would be the successor to the Resilient Home program, and provide benefits to Ava customers in the form of cost savings resulting from active battery management as well as capacity-based payments for use of storage. Program design is under development, and seeks to provide a route for broad participation for Ava customers regardless of battery vendor while advancing local solar resource usage and peak load management. Program design is under development, and seeks to provide a route for broad participation for Ava customers regardless of battery vendor while advancing local solar resource usage and peak load management.

Staff will return to the Board within the first half of 2024 with a program to encourage solar plus storage adoption and usage in Ava’s service area via meaningful, on-going capacity-based payments based on customer participation.

Second, all SBP CARE/FERA Ava customers - including those transitioning from NEM 1.0 and 2.0, or those customers who were required to add solar to meet the California building code for new housing - will be eligible for a \$0.01 per kWh Ava adder for all exported energy. Note that this is on top of the Energy Export Credit Bonus that new installations will receive.

Third, all remaining SBP Ava customers, again, including those transitioning from NEM 1.0 and 2.0, or those customers who were required to add solar to meet the California building code for new housing and including non-residential customers - will be eligible for a \$0.025 per kWh export adder during the Ava peak hours of 3-8 pm, 7 days a week.

Staff proposes the Ava bonus structure will be in place for five years, from 2024 to 2029. The Ava tariff will include a provision to edit or remove the adder after the five-year period. In contrast with the IOU’s glidepath, this bonus structure is flat for five years, which allows Ava to learn more about SBP, customer installation patterns and behaviors, and develop our robust battery storage capacity-based incentive program. After 2029, Ava may step down or remove this adder.

Table 2: Comparison between Energy Export Bonus and Ava Adders

	Implementer	Customer Segment	Timeframe	Structure	Amount
Energy Export Bonus Credit (SBP base plan)	PG&E Ava	Residential customers with new voluntary solar installation after April 14, 2023	Applies to customers who install solar in the first 5 years of the new SBP program (2023-2027); the rate is locked in for 9 years	- Value of credit goes down by 20% each year within the 5-year period to incentivize going solar sooner - CARE/FERA customers receive a higher credit	Varied, from \$0.004 to \$0.090 per kWh
Ava Adder - CARE/FERA (Proposed)	Ava	All CARE/FERA SBP customers Residential, voluntary or involuntary install, new or transitioning from NEM 1.0/2.0	5 years (2024 – 2029); Ava tariff will include a provision to edit or remove after the 5-year period	- Flat adder for energy exports at all hours - On top of Energy Export Bonus credit, if applicable	\$0.01 per kWh
Ava Adder - Peak Hours (Proposed)	Ava	All SBP customers, non-CARE/FERA Residential, commercial, voluntary or involuntary install, new or transitioning from NEM 1.0/2.0	5 years (2024 – 2029); Ava tariff will include a provision to edit or remove after the 5-year period	- Flat adder for energy exports between Ava peak hours of 3-8 pm - On top of Energy Export Bonus credit, if applicable	\$0.025 per kWh (3-8 pm)

Fiscal Impact

The fiscal impact is in the direction of customer credits that are shifting from Ava to the customer. With the Ava Peak Hours Adder scenario outlined above, we see an additional \$20 in annual credits for non-CARE/FERA customers and \$45 in annual credits for CARE/FERA customers through the Ava CARE/FERA Adder.

Table 3: Estimated annual credits for excess generation

	CARE/FERA, new voluntary installation	Non-CARE/FERA, new voluntary installation	CARE/FERA, NEM transition or mandatory install	Non-CARE/FERA, NEM transition or mandatory install
Base SBP	\$481	\$236	\$167	\$163
SBP + Ava Adders	\$525	\$257	\$211	\$184

The value for commercial, or non-residential, customers is not as meaningful to model, as system size and usage is highly variable.

Overall, five years of the Ava Adders will mean an additional \$8.4M in customer credits for solar production, with the bulk of those credits being applied to excess generation during the Ava peak demand period of 3-8 pm.

Table 4: Annual Export Generation Costs under Solar Billing Plan Scenarios

	2024	2025	2026	2027	2028	Total
Base SBP	\$4,579,619	\$7,824,747	\$12,228,903	\$16,572,929	\$20,394,958	\$61,601,157
CARE/FERA	\$820,571	\$1,396,707	\$2,172,137	\$2,926,022	\$3,555,654	\$10,871,091
Non-CARE/FERA	\$3,759,048	\$6,428,040	\$10,056,766	\$13,646,907	\$16,839,304	\$50,730,066
SBP + Ava Adder	\$5,227,403	\$8,982,844	\$13,898,276	\$18,755,731	\$23,099,998	\$69,964,251
CARE/FERA	\$1,011,016	\$1,736,504	\$2,661,738	\$3,565,624	\$4,344,755	\$13,319,637
Non-CARE/FERA	\$4,216,387	\$7,246,339	\$11,236,539	\$15,190,107	\$18,755,243	\$56,644,615

As shown in Figure 1, existing NEM customers will transition to SBP each year, with 2,500 NEM customers transitioning to SBP by 2028. The estimated annual credits shown in Table 4 are based on these transitioning customers and estimated new SBP installations.

Attachment

A. Presentation

Solar Billing Plan Policy Proposal

Executive Committee Meeting

November 1, 2023



1. Introduction
2. Base Solar Billing Plan
3. Proposed Ava SBP
4. Fiscal Impact - Customer
5. Fiscal Impact - Ava
6. Recommendation



Introduction

Solar Billing Plan Refresher

- SBP is the successor to NEM 2.0. Rather than receive the retail rate for generation that is exported to the grid, customers receive compensation at a new Avoided Cost Calculation (ACC) rate, called the Energy Export Credit (EEC).
- The EEC rate better aligns with the value of onsite solar and other distributed energy resources.
- EEC rates vary by the hour and the month. Spring and summer mid-day EEC prices are the lowest while late summer early evening prices are the highest.

Eligibility and Timeline

- Applies to customers with signed interconnection agreement after April 2023 or after 20-years with NEM 1.0/2.0 service
- PG&E's billing system for residential customers is scheduled to be online in mid-December 2023, non-residential customers in July 2024
 - Until the billing system is ready, PG&E and Ava will continue to bill SBP-eligible customers on NEM



Base Solar Billing Plan: CPUC/PG&E Glidepath

Recipients:

- New, voluntary residential installations that begin service eligible for SBP

Bonus structure:

- Value is provided to the customer for nine years
- Value is locked, based on the installation year
- Bonus is zero for installations starting in 2028

	Residential \$/kWh	Low Income \$/kWh
2023	\$0.022	\$0.090
2024	\$0.018	\$0.072
2025	\$0.013	\$0.054
2026	\$0.009	\$0.036
2027	\$0.004	\$0.018



Ava Solar Billing Plan

Staff proposes to implement SBP, largely mirroring PG&E's structure - with three major differences:

1. Peak load management compensation program
2. CARE/FERA export adder
3. Peak hours export adder



Peak Load Management Compensation: Capacity-Based Battery Storage Program

Benefits of Paired Solar + Storage with SBP

- Customers limit their excess exports, saving their daytime surplus to use during higher priced evening hours
- Potential peak load management for Ava

Ava can help encourage battery storage with solar installations

- Ava staff is exploring program opportunities to compensate customers with ongoing capacity-based payments
 - Customers align their use with Ava's peak and, also flex with price signals provided by Ava
 - Potential successor to the Resilient Home program
 - Cost savings resulting from active battery management as well as capacity-based payments for use of storage

Program Proposal expected in Q1/Q2 2024



Proposed Ava Adders

Recipients

- All SBP customers

Structure

- Constant adder, applied through EOY 2028
 - Tariff written to allow for modification starting in 2029
- CARE/FERA customer Adder is applied on all exports
- Non-CARE/FERA Adder is applied to exports during Ava's peak hours of 3-8pm
 - Encourages exports when they are most valuable to all Ava customers

Customer Group	Adder	Application
Residential CARE/FERA	\$0.01	All exports
Resi + non-Resi Non-CARE/FERA	\$0.025	Exports between 3-8pm



Ava Adder Duration

The Ava Adders as proposed will be in place for five years, through EOY 2028. By 2029, staff expects to use SBP data to better understand:

- Solar installation patterns, including rate of install and size of system
- Energy use behaviors
- Battery storage characteristics, such as size, usage patterns, and installation rates



Customer Financial Impacts – Annual Credits for Exports

	CARE/FERA, new voluntary installation	Non-CARE/FERA new voluntary installation	CARE/FERA transitioning or required install	Non-CARE/FERA transitioning or required install
Base SBP	\$481	\$236	\$167	\$163
SBP + Ava Adders	\$525	\$257	\$211	\$184

Figures here are based on an average residential customer, exclusive of battery storage and Ava's upcoming battery storage program



Ava Financial Impacts – Credits Provided for Exports

	2024	2025	2026	2027	2028	Total
Base SBP	\$4.6M	\$7.8M	\$12.2M	\$16.6M	\$20.4M	\$61.6M
CARE/FERA	\$0.8M	\$1.4M	\$2.2M	\$2.9M	\$3.6M	\$10.9M
Non-CARE/FERA	\$3.8M	\$6.4M	\$10.1M	\$13.6M	\$16.8M	\$50.7M
SBP + Ava Adder	\$5.2M	\$9.0M	\$13.9M	\$18.8M	\$23.1M	\$70.0M
CARE/FERA	\$1.0M	\$1.7M	\$2.7M	\$3.6M	\$4.3M	\$13.3M
Non-CARE/FERA	\$4.2M	\$7.2M	\$11.2M	\$15.2M	\$18.8M	\$56.6M



Summary of Recommendations

Implement Solar Billing Plan with:

- A planned capacity-based battery storage incentive program for peak load management
- A constant, five-year long Ava Adder available to all SBP customers:
 - CARE/FERA customers receive an extra \$0.01 per exported kWh
 - Non-CARE/FERA customers receive an extra \$0.025 per exported kWh between 3-8pm



Thank you!

Kelly Brezovec

Director, Account Services

Kbrezovec@avaenergy.org

Online

avaenergy.org

Phone

1.833.699.3223

Email

customer-support@avaenergy.org

Social

PoweredWithAva

