



**ALAMEDA
MUNICIPAL POWER**

A Department of the City of Alameda

**AGENDA ITEM NO.: 5.A.1
MEETING DATE: 05/16/2022
ADMINISTRATIVE REPORT NO.: 2022-71
ACTION: FOR INFORMATION ONLY**

To: Honorable Public Utilities Board

Submitted by: _____ **/S/**

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AGM – Customer and Energy Resources

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Approved by: _____ **/S/**

Nicolas Procos
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Subject: *For Information Only*, Cap-and-Trade, Low Carbon Fuel Standard, and Renewable Energy Credits Discussion

RECOMMENDATION

For information only, Cap-and-Trade, Low Carbon Fuel Standard, and Renewable Energy Credits discussion.

BACKGROUND

On April 25, 2022, Public Utilities Board (Board) reviewed Alameda Municipal Power's (AMP) preliminary budget at the Special Budget Workshop. The budget presentation discussed proposed fiscal year 2023 spending of Cap-and-Trade, Low Carbon Fuel Standard, and Renewable Energy Credit funds.

DISCUSSION

See attached presentation for additional background and discussion of Cap-and-Trade, Low Carbon Fuel Standard, and Renewable Energy Credit funds.

FINANCIAL IMPACT

There is no financial impact currently.

LINKS TO BOARD POLICY AND OBJECTIVES

- AMP Strategic Plan – Sustainability
Strategy 1: AMP will support opportunities in the electrification of the transportation system and buildings to reduce greenhouse gas (GHG) emissions.
Strategy 2: AMP will deliver and maintain 100 percent carbon-neutral energy resources by 2020 and beyond.

EXHIBITS

A. Presentation

Cap-and-Trade, Low Carbon Fuel Standard, and Renewable Energy Credits Discussion

May 16, 2022

Background

- In addition to rates, Alameda Municipal Power (AMP) has three buckets of funding sources described as designated reserves used to fund various projects, programs, and renewable purchases.
- The three buckets are Cap-and-Trade (C&T), Low Carbon Fuel Standard (LCFS), and Renewable Energy Credits (RECs).

Background: Cap and Trade (C&T)

- California Air Resource Board's (CARB) market-based C&T program is the main outcome of Assembly Bill (AB) 32, a law originally designed to keep emissions at 1990 levels by 2020. AB 398 extended the program through 2030.
- C&T sets a cap on emissions across sectors that comprise around 80 percent of California's total emissions.
- CARB creates and distributes allowances equal to the total amount of permissible emissions and then reduces the number of allowances each year.

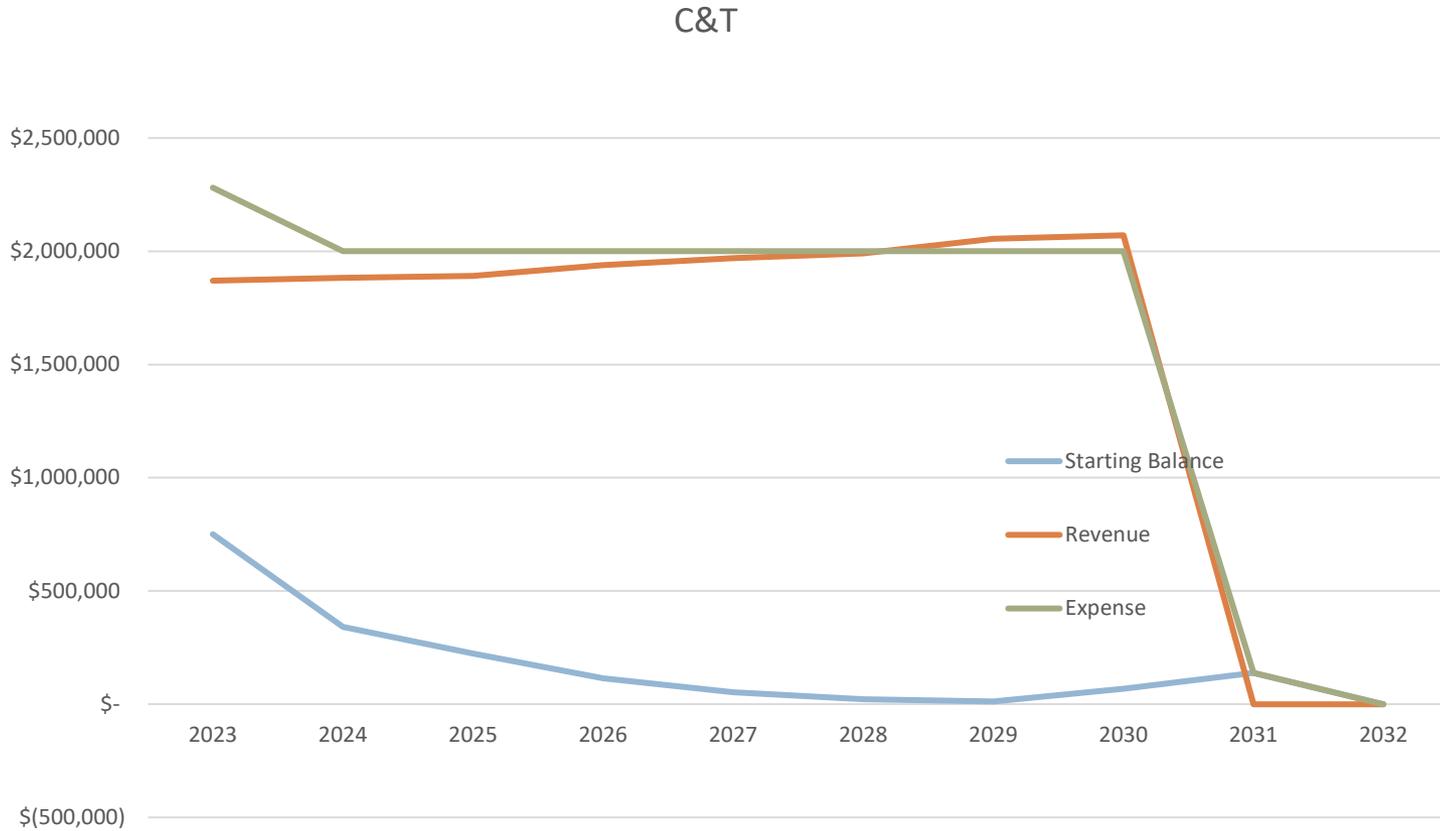
C&T Use of Allowance

- The C&T program requires that the value of allowances be used to benefit **ratepayers** and achieve ongoing greenhouse gas (GHG) emissions reductions.
- AMP staff submits an annual report to CARB with estimates of GHG emissions reductions.

C&T Forecast

- AMP is required to put all allowances into quarterly C&T auctions. Revenues are expected to stay within \$1,000,000 to \$2,000,000 per year.
- AMP staff plans to continue to spend all C&T funds on renewable power purchases.

C&T Forecast



Historical Use of C&T Funds

Calendar Year	2018	2019	2020
Renewable Purchases		\$250,002	\$1,185,004
SF6 Breaker Replacements	\$236,015	\$499,818	\$579,509
AMP EVs/Chargers		\$69,232	

Low Carbon Fuel Standard (LCFS)

- CARB's market-based program identified under AB32 as an early action to decrease the carbon intensity of CA's transportation fuels by 10 percent by 2020 and later extended by CARB to 20 percent by 2030.
- Sets annual carbon intensity (CI) standards for gasoline, diesel, and the fuels that replace them.
- Transportation fuel providers that fail to meet the CI standards must purchase credits.
- **AMP** generates credits as a low carbon fuel provider of electricity to electric vehicles (EV).



LCFS Equity Requirement

- An increasing amount of LCFS credit revenue must be spent towards equity programs, capping out at 50 percent of all revenues.

Current AMP Programs to achieve Equity Requirements:

- No disadvantaged communities (DAC), evaluating most appropriate way to define low income
- Multi-family Level 2 Charger Rebate program
- Direct-current fast charger (DCFC) free charging at AMP headquarters
- Transportation Electrification education materials (webinars, flyers, and outreach)
- Low Income adders to Used EV rebate program

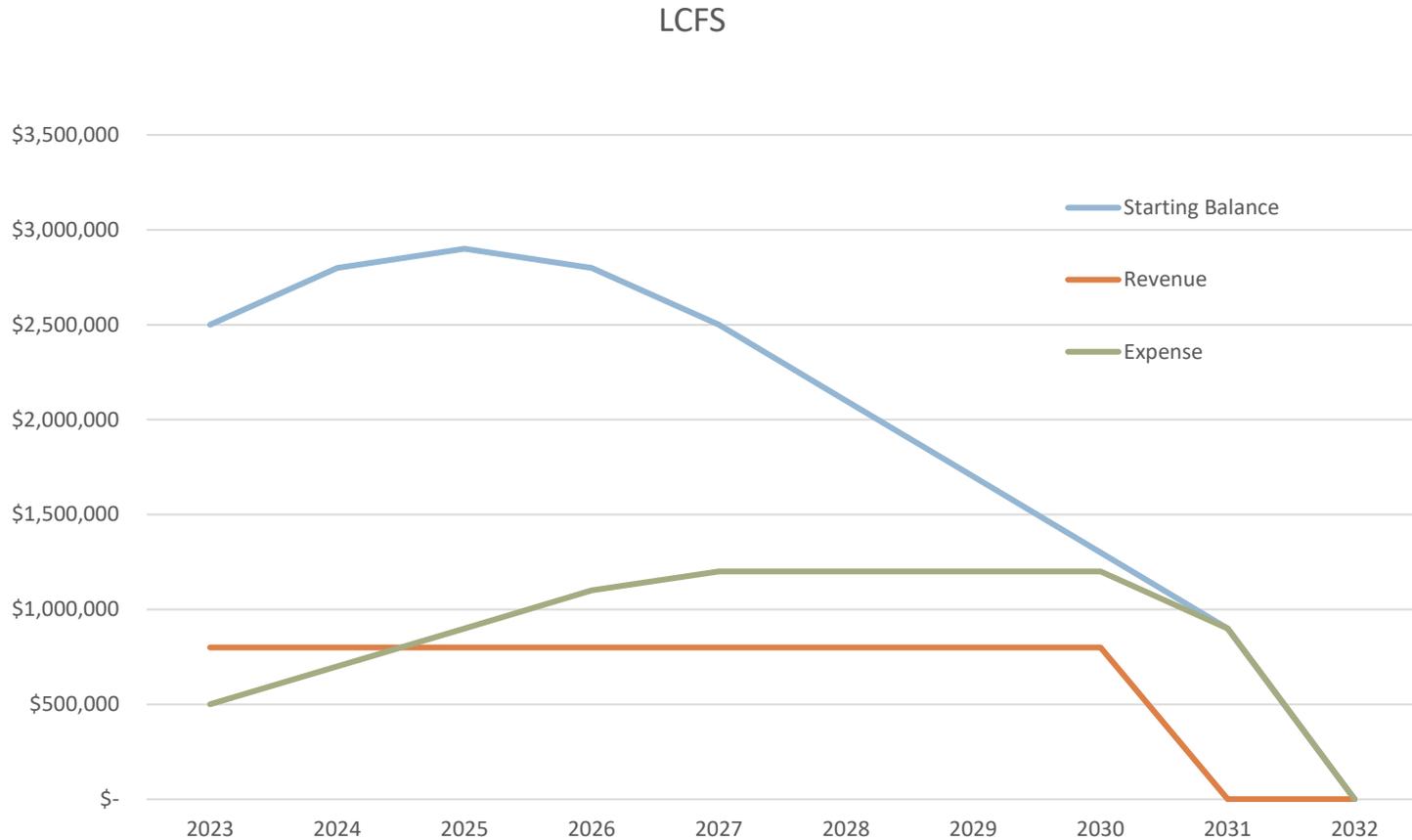
Additional Programs:

- July 1st, e-mobility rebate program
- Evaluating other programs to offset electric vehicle supply equipment (EVSE) infrastructure costs (panel upgrades for EV chargers)
- Evaluating initial program design for a Multi-family EVSE technical assistance program

LCFS Forecast

- Recent LCFS credit price volatility has increased uncertainty on annual revenues; most years credit proceeds will be between \$500,000 and \$1,000,000.
- Annual spending is projected to ramp up to \$1,200,000 over the next several years.

LCFS Forecast



Historical Use of LCFS Funds

Calendar Year	2019	2020	2021
EV Education/Outreach	\$12,055	\$23,340	\$13,089
Level 2 Chargers and Used EV Rebates	\$129,548	\$103,770	\$169,248
AMP Public Chargers	\$9,897	\$36,021	\$33,386

LCFS Future Expenditures

FY 23 Budgeted Expenses

FY 23 Budgeted LCFS = \$780,000

- \$280k for Ford Lightning Electric trucks
- \$60k electricity & maintenance/repairs for EV Chargers at AMP service center
- \$440k EV Charger Rebates for residential and commercial customers and public outreach

Forecasted LCFS Expenditure Goals

- Continue providing incentives for charging infrastructure and purchasing of battery electric vehicles (BEV)
- Integrate additional equity focused elements into program design
- Technical advising services for Multi-family customers to install EVSE
- Continue offering education materials/events

Background: Renewable Energy Credits (RECs)

- AMP previously entered into two separate REC sale transactions to monetize AMP's REC positions that exceeded current regulatory requirements.
- AMP has stopped REC sale transactions as part of AMP's commitment to maintain 100 percent clean energy.
- The cumulative sales earned approximately \$31 million dollars.

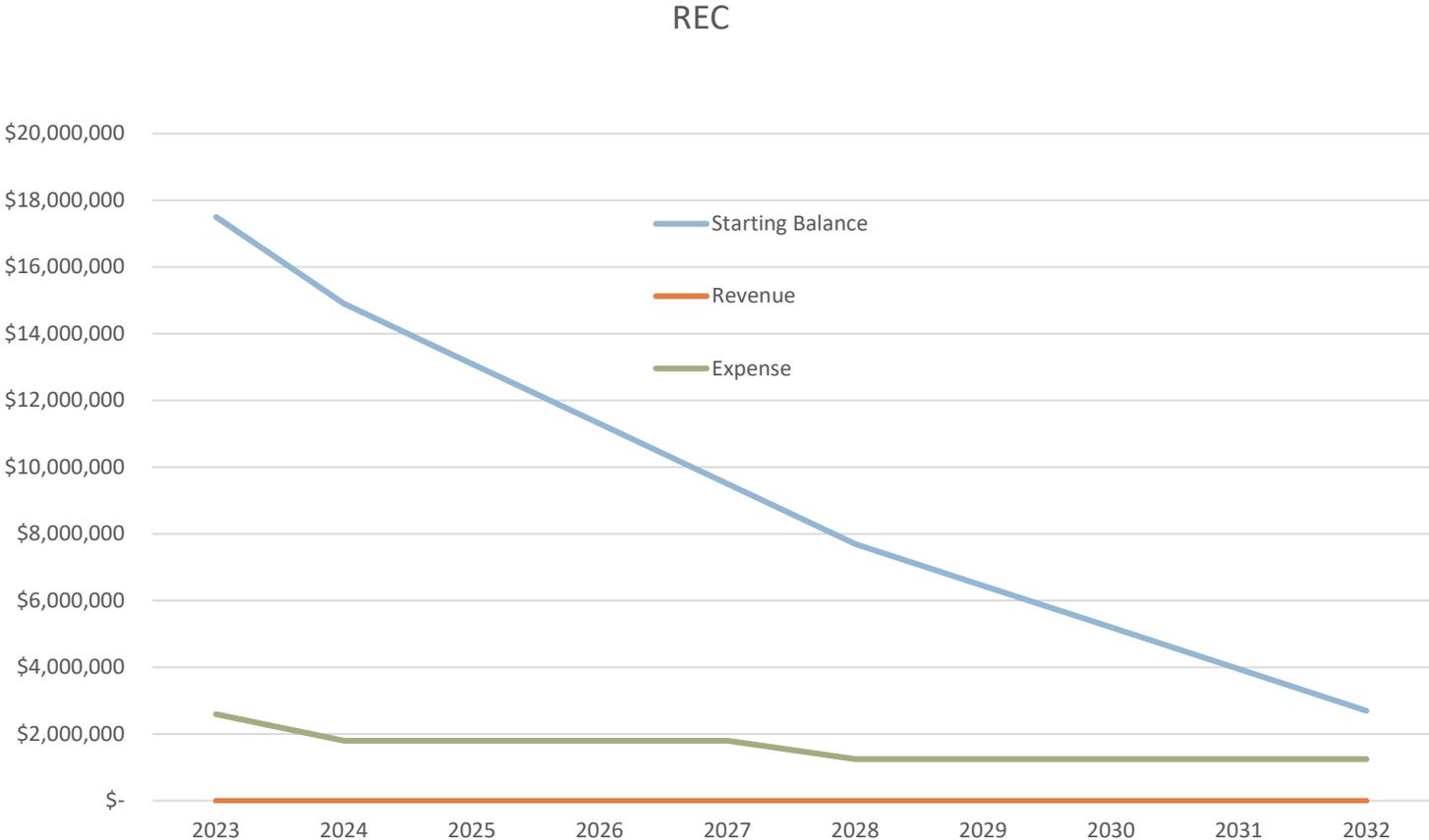
REC Guidance

- The Board approved in Resolution No. 4889 guidance for the use of REC sale proceeds:
 - Revenues accruing from the sale of renewable energy that are not required to comply with Board-approved policy should be retained only for the benefit of utility ratepayers and should be used to support AMP-directed initiatives to reduce GHG emissions associated with electricity use by AMP's customers.
 - Preference will be given to GHG reduction projects with the most attractive benefit cost ratio.

REC Forecast

- Reserve levels drop each year as there are no new revenue sources.
- Projected Balance at start of FY23 is \$17,500,000.
- Annual spending is projected at \$1,800,000
 - \$900,000 for Customer Programs
 - \$900,000 for renewable purchase between Silicon Valley Power (SVP) and Doolittle Solar project.
- Projections anticipate the reserve to be exhausted in around 10 years.

REC Forecast



Historical Use of REC Funds

FY	2020	2021
SVP Contract	\$547,000	\$547,000
Customer Programs	\$733,000	\$545,000

REC Based Programs Examples

Marketplace

EAP+

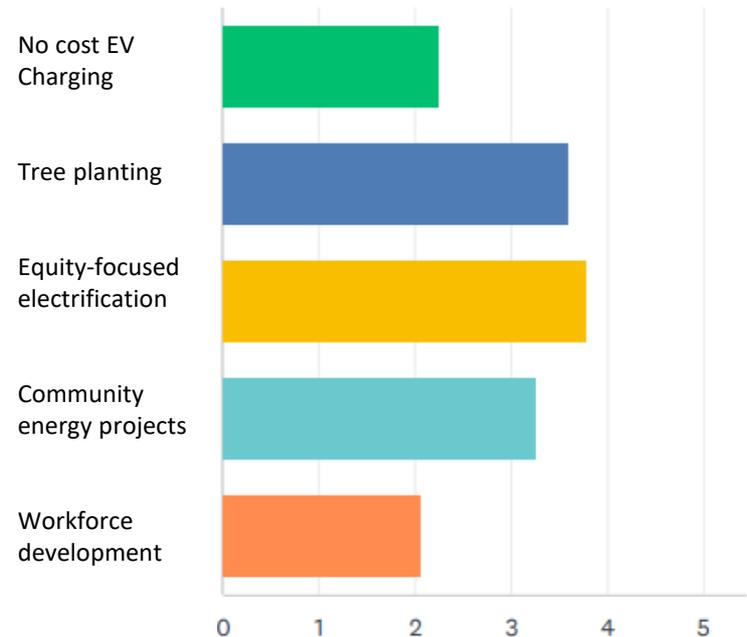
Building Electrification Education/Outreach

Residential Electrification Rebates

Commercial Electrification Rebates

Other Revenue Sources

- Alameda Green replacement program
 - Potential ~\$300k/yr
 - Solar interconnection and permit fees
 - Direct install heat pump water heaters for income qualified
 - Multi Family electrification



Key Takeaways

- C&T/LCFS
 - Regulatory restrictions
 - Staff drawing down C&T balance levels
 - Continue rolling out programs and rebates for LCFS
- REC
 - Consider whether use of REC funds should be expanded (For example, to help pay for additional existing renewable energy costs)
 - Current funds already earmarked for current and future programs and will drop to zero in around 10 years
 - Continued use of the programs must be funded by rates
- Other Revenue Sources
 - Potential future programs/projects for GHG reductions

Next Steps

- Continue using designated reserves to implement effective customer programs to promote transportation and building electrification.
- If changes are needed to REC policy, return to Board in the summer/fall with modifications.
- Continue using designated reserves to maintain strategic plan goals:
 - *Achieve 100 percent carbon-neutral energy portfolio by 2020 and maintain in the future, while being able to maintain competitive position*
 - *AMP is in top three of similarly-sized public utilities in California for percent of customers receiving EV and EE incentives.*

Questions?

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