Date of Hearing: April 7, 2021

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY
Chris Holden, Chair
AB 354 (Cooper) – As Amended March 18, 2021

SUBJECT: Energy efficient appliance rebate program

SUMMARY: Requires the California Energy Commission (CEC), by July 1, 2022, to create a three-year appliance rebate program (Program), funded upon appropriation by the Legislature, for low-income customers to purchase new energy star or other energy efficient appliances. Specifically, **this bill**:

1) Specifies customer eligibility for the Program to be annual household incomes that are no greater than 200 percent of the federal poverty guideline levels. These are the same income requirements currently in place for the investor-owned utilities' (IOUs) California Alternative Rates for Energy (CARE) program.

2) Requires the CEC, in administering the Program, to:

    a. Establish a rebate level for each appliance product type.

    b. Define how the rebates will be processed, including a digital option for rebate applications and rebate delivery to customers.

    c. Create a plan for recycling old, replaced appliances.

    d. Determine energy efficiency requirements for those appliances that are eligible for rebates.

3) Requires the CEC to determine the amount of rebate a customer shall receive, setting a maximum of $300 per eligible appliance and limiting each customer to no more than three rebate redemptions during the Program.

4) Specifies an additional $25 will be awarded to customers for recycling each replaced appliance.

5) Establishes appliances eligible under the Program as:

    a. Refrigerators,

    b. Washers,

    c. Dryers,

    d. Dishwashers,

    e. Ovens and cooktops,

    f. Other appliances that meet energy consumption or energy efficiency thresholds, as determined by the CEC.

6) Specifies rebates shall apply to purchasing new gas appliances that meet energy efficiency standards, and shall only be applicable to appliances purchased for an eligible customer's primary residence.

7) Mandates no cost nor rate increases shall result from implementing the Program, and specifies the enacting statute will only become operative upon appropriation by the Legislature of sufficient funds to run the Program.

8) Sunsets the Program on July 1, 2025.

9) Establishes legislative findings relating to the price sensitivity around appliance purchases for some Californians, and suggests rebates can help mitigate these sensitivities and transition households to meeting statewide policy objectives of doubling energy efficiency savings by January 1, 2030.

EXISTING LAW:

1) Requires the CEC to establish appliance efficiency standards based on a reasonable use pattern. The CEC may prescribe other cost-effective measures, not preempted by federal labeling law. An appliance manufactured on or after the effective date of these standards may not be offered for sale in California unless it complies with the standards. (Public Resources Code § 25402 (c)(1)).

2) Authorizes the CEC to adopt standards for appliances to facilitate the deployment of flexible demand technologies, based on feasible efficiencies and improvements that will enable appliance operations to be scheduled, shifted, or curtailed to reduce emissions of greenhouse gases (GHG) associated with electricity generation. Mandates that the flexible demand appliance standards be cost-effective. (Public Resources Code § 25402 (f))

3) Authorizes the CEC to adopt regulations establishing an administrative enforcement process for appliance efficiency violations and allows the CEC to assess civil money penalties for violations up to $2,500 for each violation. Penalties assessed for appliance efficiency violations are deposited into the CEC's Appliance Efficiency Enforcement Subaccount and fund the CEC's appliance efficiency enforcement activities upon appropriation by the Legislature. (Public Resources Code § 25402.11)

4) Requires electric and gas IOUs to provide weatherization assistance, and specifies that weatherization means attic insulation, caulking, weather-stripping, a low flow showerhead, water heater blanket, and door and building envelope repairs to reduce air infiltration for low-income customers. This program is known as the Energy Savings Assistance Program (ESAP). (Public Utilities Code § 2790 (a), (b))

5) Specifies that weatherization may also include other building conservation measures, energy-efficient appliances, and energy education programs determined by the California Public Utilities Commission (CPUC) to be feasible and considering the cost-effectiveness of the measures as a whole and the policy of reducing energy-related hardships facing low-income households. (Public Utilities Code § 2790 (c))

6) Requires local publicly owned electric utilities (POUs) to establish a nonbypassable charge on local distribution service to fund investments in any: 1) cost-effective demand-side management service; 2) new investments in renewable energy resources and technologies; 3) research, development and demonstrations programs; and 4) services for low-income customers including energy efficiency, education, weatherization, and rate discounts. A POU may choose which among these programs it wishes to fund. (Public Utilities Code § 385)

7) Establishes the CARE program, an assistance program for low-income residential customers of IOUs with annual household incomes no greater than 200% of federal poverty guidelines. CARE discounts cannot be less than 30% nor greater than 35% of the revenues that would have been produced for the same billed usage by non-CARE customers and requires the entire discount to be provided in the form of a reduction in the overall bill for the eligible CARE customer. (Public Utilities Code § 739.1)

8) Sets a statewide target for doubling energy efficiency savings in electricity and gas final end uses of retail customers by January 1, 2030. (Public Resources Code § 25310 (c))

FISCAL EFFECT: This bill is keyed fiscal and will be referred to the Committee on Appropriations for its review.

BACKGROUND:

Federal Appliance Rebate Program – In 2009, with funding provided by the American Recovery and Reinvestment Act (ARRA), the U.S. Department of Energy (DOE) developed the State Energy Efficient Appliance Rebate Program (SEEARP) to spur economic activity and invest in long-term energy savings. SEEARP helped consumers replace older, inefficient appliances with new, efficient models. SEEARP provided almost $300 million to the 56 U.S. states and territories to support state-level consumer rebate programs for efficient appliances from December 1, 2009 to February 17, 2012.[1] Of that, roughly $35.2 million worth of rebates were allocated by ARRA to the CEC to operate SEEARP.[2]

For SEEARP, DOE gave states freedom to choose which ENERGY STAR products qualified for their programs: boilers, central air conditioners, clothes washers, dishwashers, freezers, furnaces (oil and gas), heat pumps (air- and ground-source), refrigerators, room air conditioners, and water heaters. States wishing to offer rebates on other products were required to provide justification for selecting them. California selected all the listed products as eligible for the SEEARP funds.[3]

DOE conducted many program evaluations after SEEARP ceased in early 2012. Some of the lessons learned included keeping the program simple, using a single application across any state and utility program, and offering additional incentives for recycling old appliances.[4] With the

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[1] U.S. DOE *State Energy-Efficient Appliance Rebate Program: Volume 2 – Program Results;* June 2015
[2] California Cash for Appliances; *Case Study: California State Energy Efficiency Appliance Rebate Program*; https://www.energy.ca.gov/programs-and-topics/topics/energy-efficiency
[3] Pg. 5; U.S. DOE *State Energy-Efficient Appliance Rebate Program: Volume 1 – Program Design and Lessons Learned;* June 2015
[4] Pg. 2-374; Wagley, Subid, et al. *Lessons Learned from the State Energy Efficient Appliance Rebate Program*; 2014 ACEEE Summer Study on Energy Efficiency in Buildings.

Biden Administration's recently announced "American Jobs Plan" that proposes the establishment of an Energy Efficiency and Clean Electricity Standard alongside energy efficiency updates targeted to affordable and public housing, community colleges, and child care facilities,[5] there seems potential for future federal funding focused on energy efficiency programs although it remains unclear whether appliance rebates will be a focus of those efforts.

Existing Energy Efficiency Programs – The CPUC oversees an extensive portfolio of energy efficiency programs administered by the electric and gas IOUs as well as third parties. For appliance efficiency, the IOUs maintained a program called the Plug Load and Appliance (PLA) program, beginning around 2012. The PLA Program offered rebates to customers for certain high efficiency residential appliances, consumer electronics, water heaters, pool pumps, insulation, and other high efficiency technologies. The PLA Program also had a subprogram, known as the Appliance Recycling program that provided incentives to recycle old and inefficient refrigerators and freezers. By the end of 2015, the Appliance Recycling Program had closed, due to a several factors.[6]

For low-income customers, ESAP funds energy efficiency upgrades, at no cost to qualifying participants, in eligible low-income residential homes and multifamily housing. Unlike the other energy efficiency programs, ESAP is not constrained by a cost-effective requirement, and instead considers both costs and benefits including improved health, safety, and comfort.[7] Measures for qualifying ESAP customers can include new appliance replacement for refrigerators, clothes washers, furnaces, and water heaters, among other measures. In 2020, ESAP was authorized at close to $600 million, paid for by a public purpose program surcharge in IOU rates. ESAP reached ~ 85-100%, depending on utility,[8] of the 2020 statutory goal.[9]

Some POUs and community choice aggregators (CCAs) offer energy efficiency programs. CCAs and POUs are subject to the statewide goal established in SB 350 (De León, Chapter 547, Statutes of 2015) which required the CEC to set targets to double energy efficiency savings in the state by January 1, 2030. During the 2018 reporting cycle, POUs spent more than $218 million on energy efficiency programs, resulting in more than 638-gigawatt hours of net annual energy savings.[10] Los Angeles Department of Water and Power alone represents more than half (54.2%) of the total annual energy savings for public power in 2018. Together with Sacramento Municipal Utility District, the two largest POUs represent 71.6 percent of the total annual energy savings achieved by POUs in 2018. By late 2019, two CCAs had energy efficiency programs using ratepayer dollars collected and distributed by the CPUC. These are MCE,[11] which operates a handful of efficiency programs, and Lancaster Clean Energy, which was approved in 2019 to

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[5] The White House; "FACT SHEET: The American Jobs Plan;" March 31, 2021 https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/
[6] Pg. 27, CPUC *Energy Efficiency Portfolio Report*; May 2018.
[7] Pg. 31, CPUC *Statewide Energy Savings Assistance Program 2017-2020 Cycle Policy and Procedures Manual*; Version revised September 2019. https://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442457425
[8] Low Income Oversight Board Meeting "Joint IOU's Unspent Funds for ESAP"*;* September 17, 2020. https://liob.cpuc.ca.gov/wp-content/uploads/sites/14/2020/12/Item-009c_IOU-Unspent-Funds-for-ESA-LIOB-200917.pdf
[9] Goal of ~ 401,500 homes reached; see *CPUC 2020 Annual Report*, pg. 57.
[10] Pg. 48 CEC *Final Commission Report: 2019 California Energy Efficiency Action Plan*; December 2019.
[11] Formerly Marin Clean Energy.

pursue nonresource programs.[12] In addition to these CCAs acting as program administrators with the CPUC, others, such as Sonoma Clean Power, are able to offer programs independently.[13]

Energy Star – Energy Star is a federal program administered by the United States Environmental Protection Agency. The Energy Star program provides energy efficiency information and tools for consumers, homeowners, and businesses. Through the program's rating of appliances and other plug-in loads, an Energy Star score can guide consumers to purchase energy efficient products.[14] This tool is also used as the foundation for the CEC's benchmarking program. Energy Star certified appliances can vary widely, from natural gas furnaces to high-efficiency heat pumps, as the program considers contributions to energy savings nationwide.

COMMENTS:

1) *Author's Statement*. "In order for California to continue on its path towards a sustainable future, Californians need to begin to modernize their homes. AB 354 will help Californians purchase energy efficient appliances that will not only help us reach our goals, but will help out working families with their energy costs."

2) *Who Benefits?* This bill establishes a statewide program run by the CEC for residential customers of an electric or gas utility that meet certain income qualifications. As this eligibility criteria is fairly expansive, presumably customers served by POUs, IOUs, electric service providers, and CCAs could all receive funds, should they meet the income eligibility. As this bill specifies that it will be funded through Legislative appropriation, rather than ratepayer dollars, the concern of using one pool of ratepayer dollars to fund programs benefiting another utility's ratepayers is mitigated.

3) *Natural Gas?* This bill includes a provision to allow appliance rebates to be used to offset the cost of new gas appliances, so long as those appliances meet Energy Star or similar energy efficiency standards approved by the CEC. Federal appliance efficiency law establishes test procedures and efficiency standards for a wide variety of everyday appliances, referred to as "covered products." Federal appliance efficiency law generally preempts state regulations that concern the energy efficiency, energy use, or water use of covered products for which a federal efficiency standard exists, unless an exception applies.[15] Many different exceptions exist; some reference specific state standards for specific products, while others provide broad exceptions for building standards that meet certain requirements. Another exception involves the DOE granting states a waiver from

[12] Nonresource program: an energy efficiency program that has no directly attributed energy savings, but the programs support the energy efficiency portfolio through activities such as marketing or improved access to training and education.
[13] https://scpadvancedenergycenter.org/
[14] U.S. Environmental Protection Agency, Energy Star Rating, https://www.energystar.gov/products?s=mega
[15] 42 U.S.C § 6297

preemption[16,17] or states winning lawsuits against the federal government over specific rules.[18]

In California, appliance regulations generally concern products that are not federally covered products, or federally covered products for which federal efficiency standards do not exist. Such standards are not preempted by federal law. This bill ties rebate eligibility for natural gas appliances to efficiency standards and federal energy star labeling, thereby welcoming many natural gas appliances to be eligible for this program's rebates. It may be worth considering such a policy in the context of larger state GHG reduction goals, especially in the building sector,[19] when the usable lifetime of these appliances may be a decade or longer.

4) *Limited Potential for Savings.* This bill establishes a statewide program for appliance rebates with the aim of increasing energy efficiency in the residential building sector. As mentioned above, appliance rebates and increasing appliance efficiency were popular targets of both state and federal action, especially with the American Recovery and Reinvestment Act of 2009. However, after more than a decade, much of the market around energy efficient appliances has changed, largely due to improved federal and state appliance efficiency standards. A 2015 report by Research Into Action concluded[20] that "the greatest potential for energy savings [were] in product categories that have not historically been subject to efficiency regulations and voluntary standards." Product categories like refrigerators, which are included in this bill, had "largely achieved their energy savings potential and any additional efficiency gains are likely to be incremental."[21] These trends have continued, and by 2018 – as reported by the CPUC in their Energy Efficiency Report – only 4.7% of electricity savings by end use came from appliances;[22] for natural gas savings, this value was only 1.1%.[23]

5) *Related Legislation.*

AB 699 (Salas) establishes the Flexible Demand Appliances Rebate Program at the CEC to provide a point-of-sale rebate for qualified flexible demand appliances to qualifying residential ratepayers of POUs, IOUs, ESPs, and CCAs. Status: to be heard in the Utilities and Energy Committee on April 7th, 2021.

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[16] 42 U.S.C. §6297 (d)
[17] https://www.energy.gov/eere/state-petitions-exemption-federal-preemption
[18] January 19, 2021 "Attorney General Becerra Continues Fight to Protect EE Standards for Household Appliances;" Office of the Attorney General Press release; https://oag.ca.gov/news/press-releases/attorney-general-becerra-continues-fight-protect-energy-efficiency-standards
[19] AB 3232 (Friedman, Chapter 373, Statutes of 2018)
[20] Pg. 5, Research Into Action, *Product Trends and manufacturer Insights for Residential Laundry, Cooking, and Refrigeration Appliances: Final Report*; September 2015. Note – this report was funded by PG&E, SCE, SDG&E, and Sempra.
[21] *Ibid.*
[22] Pg. 23, CPUC *Energy Efficiency Portfolio Report*, May 2018.
[23] Pg. 24, *Ibid.*

6) *Prior Legislation.*

AB 1846 (Salas) required each IOU and POU to offer to low-income ratepayers in their service territories instant rebates for smart thermostat device purchases, as specified. Status: Died – Assembly Committee on Utilities and Energy.

SB 49 (Skinner) modifies the CEC's appliance energy efficiency regulatory authority to allow the CEC to establish appliance efficiency standards that facilitate the deployment of flexible demand technologies. Requires the California Natural Resources Agency to conduct an assessment of upgrades to the State Water Resources Development System that would support California's climate goals. Status: Chapter 697, Statutes of 2019.

AB 793 (Quirk) requires electric IOUs, by June 30, 2016, to develop and implement educational plans and incentive programs for customers to control their electricity use and acquire energy management technology. Requires the CPUC to require IOUs to include home energy management technology in weatherization programs for low-income customers. Status: Chapter 589, Statutes of 2015.

SB 350 (De León) among its many provisions, requires the CEC, in collaboration with the CPUC, to establish annual targets for energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and gas final end uses of retail customers by January 1, 2030. Status: Chapter 547, Statutes of 2015.

SB 17 (Padilla) establishes the smart grid policy of the state, and requires the CPUC to determine the requirements for a smart grid deployment plan and each electrical corporation to develop and submit a smart grid deployment plan to the CPUC for approval by July 1, 2011. Status: Chapter 327, Statutes of 2009.

7) *Double Referral.* This bill is double-referred; upon passage in this Committee, this bill will be referred to the Assembly Committee on Natural Resources.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Oppose

None on file.

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