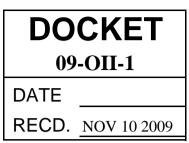
CALIFORNIA ENERGY COMMISSION



CALIFORNIA'S STATE ENERGY EFFICIENT APPLIANCE REBATE PROGRAM

INITIAL STUDY AND PROPOSED NEGATIVE DECLARATION

DOCKET # 09-OII-1

NITIAL STUDY AND PROPOSED NEGATIVE DECLARATION

November 2009 CEC-400-2009-026-CMD



Arnold Schwarzenegger, *Governor*

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PROPOSED NEGATIVE DECLARATION

Adoption of Guidelines to Implement California's State Energy Efficient Appliance Rebate Program

The California Energy Commission (Energy Commission) was created by the Warren-Alquist Act of 1974. One of the Energy Commission's mandates is to promote energy efficiency through a variety of means, including efficiency standards for appliances (Pub. Resources Code Section 25402[c]). The Energy Commission is also charged with administering federal funds allocated to, and received by, the State for energy-related projects pursuant to the American Recovery and Reinvestment Act of 2009 (ARRA) or federal acts related to the ARRA (Pub. Resources Code Section 25461[a]). The Energy Commission is authorized to use federal funds received pursuant to ARRA to award contracts, grants, and loans for energy efficiency, energy conservation, renewable energy, and other energy-related projects and activities authorized under ARRA (Pub. Resources Code Section 25461(a)). The U.S. Department of Energy (DOE) has allocated the Energy Commission \$35.2 million in ARRA funds to implement a State Energy Efficiency Appliance Rebate Program (SEEARP) for California that will provide rebates to encourage the installation of energy efficient residential appliances. The Energy Commission is proposing to adopt *California's State Energy Efficient Appliance Rebate Program Guidelines* (*Guidelines*) to implement and administer the SEEARP for California and award program funds.

The California Environmental Quality Act ("CEQA," Public Resources Code Sections 21000 et seq.) requires public agencies to identify and consider the potential environmental effects of their "projects," as that term is defined, and, when feasible, mitigate any related adverse environmental consequences. The proposed adoption of the *Guidelines* to implement and administer the SEEARP for California is a discretionary decision undertaken by a public agency and has the potential to result in direct or indirect physical changes in the environment. Thus, it constitutes a "project" under CEQA (Public Resources Code Section 21065). Therefore, the Energy Commission has prepared this Initial Study to assess the potential significant effects of the proposed *Guidelines* on the environment.

The proposed Guidelines and program plan are contained in:

California's State Energy Efficient Appliance Rebate Program Guidelines (Appendix A of the Initial Study, attached).

The potential environmental impacts of the proposed *Guidelines* are analyzed in the attached document:

Initial Study, Environmental Checklist, and Proposed Negative Declaration – California's State Energy Efficient Appliance Rebate Program.

All of the documents listed above are available on the Energy Commission's website, <u>http://www.energy.ca.gov/recovery/energystar.html</u>, by phone at (916) 654-4147, or by electronic mail from the Energy Commission's Appliances and Process Energy Office, by submitting a request to <u>aromo@energy.state.ca.us</u>.

FINDING OF NO SIGNIFICANT IMPACT

The Initial Study demonstrates, and the Energy Commission concludes, that the proposed *Guidelines* for the SEEARP for California will not have any significant adverse effect on the environment. The attached *Initial Study, Environmental Checklist, and Proposed Negative Declaration* supports this finding.

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JAMES D. BOYD Commissioner	_ DATE:		· ·
JEFFREY D. BYRON Commissioner	_ DATE:		
JULIA LEVIN, J.D. Commissioner	_ DATE:	·	
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CHAPTER 1: Introduction

The California Energy Commission (Energy Commission) was created by the Warren-Alquist Act of 1974. One of the Energy Commission's mandates is to promote energy efficiency through a variety of means, including efficiency standards for appliances (Pub. Resources Code Section 25402[c]). The Energy Commission is also charged with administering federal funds allocated to, and received by, the State for energy-related projects pursuant to the American Recovery and Reinvestment Act of 2009¹ (ARRA) or federal acts related to the ARRA (Pub. Resources Code Section 25461[a]). The Energy Commission is authorized to use federal funds received pursuant to ARRA to award contracts, grants, and loans for energy efficiency, energy conservation, renewable energy, and other energy-related projects and activities authorized under ARRA (Pub. Resources Code Section 25461[a]). The U.S. Department of Energy (DOE) has allocated the Energy Commission \$35.2 million in ARRA funds to implement a State Energy Efficiency Appliance Rebate Program (SEEARP) for California that will provide rebates to encourage the installation of energy efficient residential appliances.

The SEEARP was created by the Energy Policy Act of 2005 and is funded by the ARRA, which provides \$787 billion in economic investment nationally to stimulate the economy. The SEEARP is administered federally by the DOE. As specified in DOE's SEEARP Funding Opportunity Announcement (DE-FOA-0000119), U.S. states, territories, and the District of Columbia ("states") are eligible to receive formula-based grants to support state specific residential appliance rebate programs. Each state may determine the scope of its program, including which appliance categories to include and the rebate amounts that will be provided. States may use federal funds to pay for the rebates and up to 50 percent of the program administrative costs.

The Energy Commission's proposed *Guidelines* for the SEEARP will establish the eligibility and procedural requirements to award program funds to qualifying applicants. The adoption of the *Guidelines* is exempt from the formal rulemaking requirements of Administrative Procedures Act (Pub. Resources Code Section 25462(a)).

The SEEARP, if successful, will cause an estimated 375,000 clothes washers, refrigerators and room air conditioners to be replaced with newer, more efficient models. This will result in an estimated annual reduction in electricity consumption of 31.9 gigawatt-hours (GWh), an annual reduction in water consumption of 943 million gallons, and an annual reduction in greenhouse gas emissions equivalent to 0.015 million metric tons of carbon dioxide (CO₂). The annual reduction in electricity consumption corresponds to an estimated reduction of criteria pollutants (NOx, SOx, PM 10, PM 2.5, and CO) totaling 10.43 metric tons annually as a result of the avoided electricity generation.

The SEEARP will help reduce the energy use resulting from the use of household appliances

¹ Public Law 111-5

with no significant change in the energy or materials needed to manufacture the appliances. Any environmental impacts associated with the manufacturing and production of qualifying energy efficient appliances under the SEEARP is offset by the reduction in manufacturing and production of non-qualifying appliances. In addition, the recycling element of the rebate program will result in an increase in recycled (as opposed to discarded) appliances, which will yield even more environmental benefits. No negative environmental impacts will occur as a result of this project.

The California Environmental Quality Act ("CEQA," Public Resources Code Sections 21000 et seq.) requires public agencies to identify and consider the potential environmental effects of their "projects," as that term is defined, and, when feasible, mitigate any related adverse environmental consequences. The proposed adoption of the Guidelines to implement and administer the SEEARP for California is a discretionary decision undertaken by a public agency and has the potential to result in direct or indirect physical changes in the environment. Thus, it constitutes a "project" under the CEQA (Public Resources Code Section 21065). Therefore, the Energy Commission has prepared this Initial Study to assess the potential significant environmental effects of the proposed Guidelines for the SEEARP.

CHAPTER 2: Description of Proposed Project

Project Name

The project is the adoption of *Guidelines* to implement a statewide appliance rebate program titled: California's State Energy Efficient Appliance Rebate Program. The program's implementation is addressed in the proposed Guidelines titled: *California's State Energy Efficient Appliance Rebate Program Guidelines (Appendix A of the Initial Study, attached).*

Project Description and Location

The project is the proposed adoption of *Guidelines* to implement an appliance rebate program that will be available statewide and administered by the Energy Commission. The following is excerpted from the proposed *Guidelines*:

"The Energy Commission has developed these *Guidelines* to implement and administer California's State Energy Efficient Appliance Rebate Program (SEEARP). The objectives of the SEEARP are:

- Save energy by encouraging appliance replacement through consumer rebates.
- Make rebates available to consumers for efficient appliances.
- Leverage SEEARP funds with existing rebate programs and partnerships.
- Keep administrative costs low while adhering to federal monitoring and evaluation requirements.
- Promote state and national rebate tracking and accountability.
- Use existing ENERGY STAR® consumer education and outreach materials.

The SEEARP was created by the Energy Policy Act of 2005 and is funded by the American Recovery and Reinvestment Act of 2009 (ARRA), which provides \$787 billion in economic investment nationally to stimulate the economy. The SEEARP is administered federally by the U.S. Department of Energy (DOE). As specified in DOE's SEEARP Funding Opportunity Announcement (DE-FOA-0000119), U.S. States, territories and the District of Columbia ("states") are eligible to receive formula-based grants to support state-specific residential appliance rebate programs. Each state may determine the scope of its program, including which appliance categories to include and the rebate amounts that will be provided for each project type. States may use SEEARP funds to pay for the rebates and up to 50 percent of program administrative costs.

These *Guidelines* describe how the Energy Commission plans to implement and administer the California SEEARP. Specifically, the *Guidelines*:

- Explain the SEEARP structure and processes.
- Specify SEEARP eligibility rules.
- Outline the rebate claim process.

1. Funding

DOE has allocated the Energy Commission \$35.2 million for the California SEEARP. Funding will be awarded on a first-come, first-served basis to eligible residential consumers who purchase California-qualified residential ENERGY STAR® products during the rebate offer period. The purchased appliances must replace appliances of the same type that are properly recycled. In accordance with DE-FOA-0000119, the SEEARP will supplement and not supplant current rebate offerings available through utility, manufacturer, and retailer programs.

2. Period of Performance and Rebate Offer Period

Under DE-FOA-0000119, states must exhaust all award funds for rebates and rebate program activities by February 17, 2012. The Energy Commission expects to issue awards in spring 2010.

The Energy Commission proposes a specific period in which to offer rebates to control oversubscription and assess program effectiveness. Rebates will be offered during one or more periods, or a single period can be extended. If the program is phased, rebate periods will be coordinated with peak purchase periods for specified appliances based on sales information received before the original rebate period launch. An example of a rebate offer period is:

- Purchase Period: March 17, 2010 to April 22, 2010 (Earth Day).
- Rebate Claim Period: March 17, 2010, to May 22, 2010 (period ends 30 calendar days after the close of the chosen purchase period).

3. Program Structure

a. Rebate Processing:

The Energy Commission will conduct a competitive solicitation to secure the services of a rebate processing firm that will perform services that may include but not be limited to: receiving rebate claims via mail-in forms with specified supporting documents (for example, proof of purchase), validating claims to ensure compliance with program requirements, issuing rebates for valid claims, and engaging in fraud prevention activities. Bidders must specify how they will perform these services. They must also demonstrate the ability to process rebates in high-volume circumstances in a timely manner, and must recommend specific methods to control oversubscription, maximize use of rebate funds by consumers, and prevent fraud, waste, and abuse. The Energy Commission may evaluate the Bidder's ability to provide leverage or matching funds. The successful Bidder must comply with federal and state requirements, including federal reporting requirements, total contract administrative costs for rebate processing services are targeted below \$1 million and cannot exceed \$1.5 million.

b. Program Administration:

As required by DE-FOA-0000119, the Energy Commission must use its SEEARP allocation to pay for the full cost of all product rebates and a maximum of 50 percent of the administrative costs to implement the rebate program. Under the provisions of this program and federal law, third parties may provide services to states to meet the federal cost sharing requirements. Because of California's current economic and budgetary constraints, the Energy Commission will rely upon in-kind services from "official partners" to reach the 50 percent match and allow ARRA funds to be used for the contract costs of rebate processing.

California will accept administrative support that includes but is not limited to: website support, marketing, form and promotional design assistance, document reproduction, public service announcements, training, sales support, reporting, and other administrative services suggested by partners. Costs associated with this work may be based on historical or internal cost information, or may represent the market rate.

4. Eligible Appliances

a. Appliance Categories

Under DE-FOA-0000119, states may determine which appliance categories will be included in the SEEARP and the rebate amounts for selected appliances. The Energy Commission has selected the following three appliance categories, which it believes provide the greatest water, energy and greenhouse gas benefits to California consumers:

- Clothes washers
- Refrigerators
- Room air conditioners

The Energy Commission selected these categories from a list of DOE-recommended ENERGY STAR® qualified appliance categories,² based on the following selection factors:

- Listing of appliance in DOE's ENERGY STAR® Appliance Program.
- Certification of appliance to the California Energy Commission.
- Availability of appliances that meet the Consortium of Energy Efficiency's (CEE) "super efficient" performance criteria.
- Ability to supplement current utility offerings.
- Cost of product, including price differentials/premiums for higher efficiency equipment.
- Minimum conflict or duplication with other ARRA energy-related efforts (that is, water heaters and heating, ventilation, and air conditioning units can be covered under the State Energy Program's building energy efficiency retrofit efforts focused on building envelope improvements).
- Market share and distribution of appliance types.
- Availability within more than one region or market.
- Availability of brands and models that meet appliance eligibility criteria (specified below).
- Availability of recycling facilities and ease of tracking/reporting of appliance.
- Benefits of recycling and availability of retailer exchanges/pick-up.
- Ability for replacement/early retirement of appliance to result in multiple and indirect benefits, including environmental benefits and energy savings.

² DOE's appliance categories include: boilers, central air conditioners, clothes washers, dishwashers, freezers, furnaces (oil and gas), heat pumps (air source and geothermal), refrigerators, room air conditioners, and water heaters. DOE recommended appliances that are commonly rebated by utilities and other energy-efficiency program sponsors. See DE-FOA-0000119, p.6.

b. Appliance Eligibility Criteria

Appliance models that fall within the eligible appliance categories listed above (clothes washers, refrigerators, and room air conditioners) must also meet the following criteria in order to be included in California's SEEARP:

- Must be listed on the ENERGY STAR® website³.
- Must be certified to the Energy Commission.
- Must comply with the efficiency criteria listed in Table 1, below.

Only those appliance models that meet the specified program criteria by December 15, 2009 will be qualified for a California SEEARP rebate within the rebate offer period. The official list of qualifying models for California's SEEARP will be published by January 1, 2010 on the Energy Commission's website at: <u>http://www.energy.ca.gov/recovery/energystar.html</u>.

Appliance	Rebate	Energy Efficiency Criteria
Clothes Washers	\$100	CEE Tier 2 or greater ⁴ - modified energy factor >= 2.0, water factor <= 6.0
Refrigerators	\$75	CEE Tier 2 or greater ⁵ - efficiency levels 25 percent or more above the federal standard
Room Air Conditioners	\$50	No additional CEE criteria.

Table 1

5. <u>Program Eligibility Rules</u>

a. Qualifying Purchaser:

To qualify for a rebate, a purchaser must meet the following criteria:

- Must be a California residential consumer with a valid California residential address.
- Must purchase a new qualifying appliance model to replace an existing appliance of the same type and in working condition.
- Must make the purchase within a specified rebate period from a California retailer.
- Must recycle the replaced appliance with an eligible recycler, consistent with California law. The Energy Commission will publish a list of eligible recyclers on its website at: <u>http://www.energy.ca.gov/recovery/energystar.html</u>.
- Must submit a completed rebate application form to the Energy Commission's rebate services provider within 30 days of the date of the appliance purchase that includes proof of purchase and recycling.

b. Purchase Restrictions:

• Rebates are limited to one appliance of each category per California residential address. A "residential address" may include a detached single family home, a condominium unit, an apartment unit, or a mobile home. Income property owners may purchase appliances on

³ <u>http://www.energystar.gov/index.cfm?c=appliances.pr_appliances</u>

⁴ <u>http://www.cee1.org/resid/seha/rwsh/reswash_specs.pdf</u>

⁵ <u>http://www.cee1.org/resid/seha/refrig/refrig-spec.pdf</u>

behalf of tenants. However, the purchase is limited to one appliance of each type per unit. Tenants may be required to obtain the property owner's permission to install the appliance.

- The appliance must be installed in the residence prior to submittal of the rebate claim.
- Rebates will be awarded on a first-come, first-served basis. Rebate applications submitted outside the specified timeframes will be disqualified.
- Rebates will not be issued for appliances purchased before or after the rebate offer period.
- The purchaser must allow access to an inspector to verify installation, as required.

c. Proof of Purchase and Recycling:

Proof of purchase and recycling may consist of the following elements:

- A completed "Rebate Application" form that may contain sections for the following:
 - Purchaser information (for example, name, mailing address, phone number, and email address).
 - Check recipient information, if the check will not be made payable to the purchaser (for example, name, address, phone number, and email address).
 - o Appliance information (for example, type, brand and model number).
 - o Purchaser type (for example, resident, income property owner).
 - Property type (for example, single family home, condominium unit, apartment unit, mobile home).
 - Inspection contact information, in the event of an inspection (for example, name, address, phone number, and email address).
 - The dated signature of the purchaser stating that the purchase meets the conditions of the rebate program and that all required proof is included with their application.
 - Terms and conditions (for example, program eligibility rules, release of liability, statement that purchase meets program eligibility rules, statement that rebate claim contains all required information, statement that purchaser must comply with applicable rules and regulations, statement that information provided is true and correct).
- A completed "Proof of Recycling" form that may contain sections for the following:
 - The mailing address of the certified recycler.
 - The certification number of the recycler to which the old appliance is delivered.
 - o The type, brand and model number of the old (previously owned) appliance.
 - The dated signature of an authorized representative of the certified recycler or qualified appliance hauler stating that the old appliance was delivered for recycling and will be recycled.
- A copy of the original purchase receipt or an original rebate receipt showing the date and location (full mailing address) of the purchase.
- A copy of the purchaser's utility bill, for address verification. The purchaser may request that information within the bill be designated confidential under the Energy Commission's regulations for confidential designation, Title 20, California Code of Regulations, Section 2505.
- The original Universal Product Code (UPC) label from the appliance's box or packaging or its equivalent.

A utility company's recycling program or a retailer's haul-away program or company may be listed as the recycler, provided that the program complies with local, California and federal law regarding appliance disposal and recycling and that the collected units are recycled and not refurbished or otherwise resold or used. These requirements include the U.S. EPA's Responsible Appliance Disposal (RAD) (<u>http://www.epa.gov/ozone/partnerships/rad/</u>) criteria and the California Integrated Waste Management Board's Appliance Recycling Guide (Publication Number: 500-94-022) and Department of Toxic Substances Certified Appliance Recycling Program (<u>http://www.dtsc.ca.gov/HazardousWaste/Mercury/Certified_Appliance_Recycler.cfm</u>). Rebate applications will be evaluated based on the completeness and accuracy of their submitted materials.

d. Rebate Processing

The Energy Commission will implement a mail-in rebate system using the selected rebate processing firm. The rebate process is expected to occur as follows:

- Eligible residential consumers will submit a rebate claim to the rebate processing firm consisting of the materials specified in the Program Eligibility Rules.
- The rebate processing firm will receive and process rebate claims, including verification that the claim satisfies program rules.
- The rebate processing firm will either issue payments and obtain reimbursement from the Energy Commission, or prepare schedules for payments by the State Controller's Office.
- The Energy Commission will work in conjunction with the rebate processing firm and partners to address consumer questions and concerns, and to track the progress of the program, rebate expenditures, and remaining funds.
- Once funds are exhausted, any remaining claims will be rejected, claimants notified, and a broad announcement made that rebates are no longer available.
- In the event that funds remain after the initial rebate period, the Energy Commission will specify a subsequent rebate period based upon the known rate of redemption from the initial rebate period."

Additional program detail is found in the full *Guidelines*, attached as Appendix A of this Initial Study.

CHAPTER 3: Energy and Environmental Impacts of the **Proposed Project**

General Impacts

There is a certain amount of natural annual turnover in the appliance market, as existing appliances reach the end of their designed lives and need replacement. The intent and design of the SEEARP is to cause the selection of an energy efficient appliance in place of an inefficient appliance that otherwise would have been purchased, rather than cause an overall increase in the purchase of appliances. The following example comes from the data published in the DE-FOA-0000119 for the project:

For clothes washers, it is estimated that 936,912 units will be sold this year within California. Of that turnover, it is estimated that 30% of new sales will meet the 2011 ENERGY STAR® efficiency threshold (equivalent to the CEE tier required to be eligible for a rebate) and 70% will fall beneath that threshold.

The SEEARP is designed to grow the *percent* of efficient appliances and shrink the *percent* of inefficient appliances sold, and does so by incentivizing the selection of the energy efficient model over the inefficient model with a rebate and counter-balancing the cost premium associated with greater appliance efficiency. Where a purchase would be made anyway but the consumer chooses an energy efficient appliance over an inefficient one due to the rebates, no resource impact is created because generally equivalent amounts of resources are consumed in creating either appliance model.

In other words, the program is designed to shift the market toward efficiency, and is not designed. to grow the market. The rebate levels were established according to the guidance provided in the DE-FOA-0000119 and taking into account rebates currently offered⁶. The rebate levels are what, in the best judgment of Energy Commission staff, are sufficient to incentivize the choice of energy efficient models *without* over-rebating and increasing demand for an appliance category. The rebates also apply only to replacement purchases, and not to purchases of new appliance for which the replacement of an old appliance cannot be demonstrated.

When compared to the overall units sold in California⁷ for the chosen appliance categories, the number of rebates expected to be issued through the SEEARP will likely affect a small, but notable, percentage of consumers' choices.

For clothes washers – 936,912 annual units sold in California versus 125,000 offered rebates, • meaning that rebates may potentially influence 13.34% of total sales.

 ⁶ Survey of rebates listed by Flex Your Power, <u>http://www.fypower.org/</u>
 ⁷ See sales data provided by DOE in the DE-FOA-0000119 Appendices.

- For refrigerators 1,037,400 annual units sold in California versus 150,000 offered rebates, meaning that rebates may potentially influence 14.46% of total sales.
- For room air conditioners 1,032,331 annual units sold in California versus 100,000 offered rebates, meaning that rebates may potentially influence 9.69% of total sales.

Of those that will participate in the rebate program, some would have purchased an energy efficient model even without the rebate (sometimes termed "free riders"). Some would have purchased an inefficient model without the rebate but will instead purchase an efficient model because of the rebate. Some would not have purchased an appliance within this year at all but will instead purchase an (efficient) appliance sooner because of the rebate. Even presuming equal numbers of participants from all three groups, the increase in sale/recycling due to the third group would be less than 5% of total annual turnover.

Based on information provided to Energy Commission staff on annual sales and appliance turnover rates, staff concludes that the rebate levels established will not motivate the purchase of a new appliance when such a purchase was not already intended. As a result, the number of appliances being disposed of is also not likely to be increased as a result of this program. To the extent that the program influences the early replacement of an older, but working, appliance, the overall affect of the program will be to accelerate the energy efficiency gains rather than increase the overall number of appliances being discarded over time.

Eligibility requirements for the program require proper recycling of the replaced appliance. These rules require that the consumer seeking a rebate demonstrate compliance with federal, state and local requirements, such as California's Appliance Recycling Program. These programs are designed to minimize or eliminate adverse environmental or health impacts associated with the disposal of household appliances.

A fact sheet regarding California's Certified Appliance Recycler program may be accessed at: <u>http://www.dtsc.ca.gov/HazardousWaste/Mercury/upload/CARfactsheet.pdf</u>

The list of Certified Appliance Recyclers may be accessed at: <u>http://www.dtsc.ca.gov/HazardousWaste/Mercury/upload/Approved-CAR-List-2.pdf</u>

In addition, the California Integrated Waste Management Board has issued Appliance Recycling Guide (CIWMB Publication Number: 500-94-022) at: <u>http://www.ciwmb.ca.gov/Publications/default.asp?pubid=47</u>.

Since this program will influence the type of appliance, not so much the number of appliances purchased in California when compared to natural annual turnover, staff concludes that the primary impacts of this program will be the reduction in energy demand associated with new appliance purchases. In addition, because old appliances are to be recycled in accordance with existing legal requirements, rather that otherwise discarded, adverse affects associated with replaced appliances will be mitigated or avoided.

Energy Impacts

The implementation of the SEEARP as proposed in the *Guidelines* will have positive energy and environmental impacts.

DOE published an Appliance Rebate Program Planning Tool⁸ to assist in the calculation of benefits arising from a state-implemented appliance rebate program. The Energy Commission estimates based on this tool that implementing the rebate program as described in the *Guidelines* will save 31.9 GWh of electricity and 943 million gallons of water annually.

To calculate the reductions in emissions associated with these savings, the Energy Commission is relying on and incorporating by reference the rationale used within the recently adopted *"Amendments to Appliance Efficiency Regulations Initial Study and Proposed Negative Declaration"*⁹. Using that rationale, a savings of 31.9 GWh would result in the following estimated annual reductions in criteria pollutants:

- TOG reduced by 3.12 metric tons
- ROG reduced by 0.23 metric tons
- CO reduced by 3.1 metric tons
- NOx reduced by 2.24 metric tons
- SOx reduced by 0.38 metric tons
- PM reduced by 0.57 metric tons
- PM10 reduced by 0.53 metric tons
- PM2.5 reduced by 0.49 metric tons

In addition to the above, there would be an estimated savings in greenhouse gases equivalent to 0.015 million metric tons of CO₂.

Implementation of the SEEARP as proposed in the *Guidelines* will help reduce the energy use resulting from the use of household appliances with no significant change in the energy or materials needed to manufacture or transport the appliances. Any environmental impacts associated with the manufacturing, production and transportation of qualifying energy efficient appliances under the SEEARP is offset by the reduction in manufacturing, production and transportation of non-qualifying appliances. This applies to the potential impact areas of Air Quality, Energy, and Hydrology and Water Quality.

Environmental Impacts

The Energy Commission completed the environmental checklist that is contained in the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq., Appendix G) to address the potential environmental effects of the proposed regulations. This assessment indicates that implementing the SEEARP as proposed in the *Guidelines* will have no adverse effect on the

⁸ DOE Planning Spreadsheet, <u>http://www.drintl.com/temp/SEOPlanningTool_9Sept2009_v1.0.xls</u>

⁹ Publication number CEC-400-2009-014, published September 2009 by the California Energy Commission. Found in Appendix D of the document.

environment. In fact, the reduction in consumed power achieved by this program will result in environmental benefits due to reductions in electricity and water use in appliances and consequent emissions reductions in California and the Western United States.

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CHAPTER 4: Environmental Checklist

Project Title	Adoption of Guidelines for the State Energy Efficient Appliance Rebate Program (SEEARP) - California
Lead agency name and address	California Energy Commission – MS 25, 1516 Ninth Street, Sacramento, California 95814
Contact person and phone number	State Program Contact One (Business Officer): Lorraine White, Senior Energy Specialist California Energy Commission <u>lwhite@energy.state.ca.us</u> (916) 654-4075 State Program Contact Two: Peter Strait, Associate Energy Specialist California Energy Commission pstrait@energy.state.ca.us (916) 651-9375
Project description	The California Energy Commission (Energy Commission) will adopt proposed Guidelines to implement the State Energy Efficient Appliance Rebate Program (SEEARP) and award program funds. The program is funded by the American Recovery and Reinvestment Act of 2009 (ARRA) and administered by the U.S. Department of Energy (DOE) The Energy Commission will provide appliance rebates to qualified residential consumers who have purchased California-qualified residential ENERGY STAR® products to replace clothes washers, refrigerators and room air conditioners and properly recycled the replaced appliance, in accordance with DOE's DE-FOA-0000119 and the Energy Commission's Program Guidelines. The Energy Commission plans to issue a total of 375,000 rebates, broken down thusly: 150,000 for Refrigerators 125,000 for Clothes Washers 100,000 for Room Air Conditioners
Responsible agencies	None
Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement)	None

Table I: Lead and Responsible Agencies

Environmental Factors Potentially Affected

For each of the environmental factors checked below, there is likely to be a small positive environmental impact due to the decrease in power generation associated with reduced electrical demand by the use of more efficient appliances. The Energy Commission's analysis reveals no significant adverse impacts.

	I. Aesthetics	x	VII. Energy		XIII. Noise
	II. Agriculture Resources	x	VIII. Hazards & Hazardous Materials		XIV. Population/ Housing
x	III. Air Quality		IX. Hydrology/ Water Quality		XV. Public Services
	IV. Biological Resources		X. Land Use/ Planning		XVI. Recreation
	V. Cultural Resources	X	XI. Mineral Resources		XVII. Transportation/ Traffic
	VI. Geology/Soils	x	XII: Natural Resources	X	XVIII. Utilities/Service Systems
					XIX. Mandatory Findings of Significance

Table II: Potentially Affected Areas

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List of Specific Issues

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
 c) Substantially degrade the existing visual character or quality of the site and its surroundings? 				х
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				х
listed above because residential appliance inside the home. The recycling requirem dumping of appliances, as failure to docu result in an applicant's ineligibility for a re II. AGRICULTURE RESOURCES – In de are significant environmental effects, lead Evaluation and Site Assessment Model (Conservation as an optional model to use	ent of the reba ment that an a bate. termining whe d agencies may 1997) prepared	te program ensur ppliance has bee ther impacts to a y refer to the Cali d by the California	es against the on properly rec gricultural reso fornia Agricultu a Department	illegal ycled will ources ural Land of
Would the project: a) Convert prime farmland, unique farmland, or farmland of statewide			<u>،</u>	
importance (farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				x
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				x
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use?				×

Table III: Specific Potential Issues

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Explanation: The SEEARP will have no ir concerns listed above because the manu either in non-agricultural areas or inside t	facturing and ι			
III. AIR QUALITY Where available, the quality management or air pollution contradeterminations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				.X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			ï	х
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?			- - - -	x
d) Expose sensitive receptors to substantial pollutant concentrations?			n	x
e) Create objectionable odors affecting a substantial number of people?			η	Х

Explanation: As described in Chapter 3 of this document, this program would affect the type of appliances chosen by a consumer, and not increase the number of appliances purchased annually. Nor is the program likely to increase the number of appliances otherwise replaced. As a result, the appliance rebates will likely result in slightly reduced power plant operation in California as compared to no increase in purchase of energy efficient appliance models. Reduced power plant operation will result in a positive air quality impact by reducing emissions of criteria and non-criteria pollutants. See the discussion of Energy Impacts in Chapter 3, above.

Although both refrigerators and room air conditioners make use of refrigerants, the recycling component of the rebate program requires that consumers provide proof that the replaced appliance has been properly recycled before a rebate can be issued. As reclamation of refrigerants is already a required element of major appliance recycling under California law and authorized recyclers already have such programs and practices in place, the implementation of this rebate program will ensure that there are no significant impacts associated with the disposal of refrigerants in the replaced appliances. Also see the discussion of Hazards and Hazardous Materials, below.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES Would	the project:			
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				×
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wild-life corridors, or impede the use of native wildlife nursery sites?	· · ·		-	x
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				x
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				×
Explanation: The SEEARP will have no in concerns listed above, because the man places that do not have sensitive biologic Impacts in Chapter 3, above.	ufacturing and	use of residentia	l appliances o	ccur in

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES Would th	ne project:			
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?			· ·	x
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		·	e e P	х
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		:		х
d) Disturb any human remains, including those interred outside of formal cemeteries?				х
concerns listed above, because the manuplaces that do not have paleontological of VI. GEOLOGY AND SOILS Would the	r cultural resou		appliances of	cour in
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				x
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			· · ·	x
ii) Strong seismic ground shaking?				X
iii) Seismic-related ground failure, including liquefaction?				x
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?	<u> </u>			X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				x

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				x
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
Explanation: The SEEARP will have no ir concerns listed above because manufact areas and use will occur inside homes.				
VII. ENERGY Would the project:		·		
a) Use exceptional amounts of fuel or energy?				x
 b) Increase demand upon existing sources of energy, or require the development of new sources of energy? 				X
Explanation: By increasing the number of appliances, purchased by consumers and purchases or increases in the recycling of energy demand by 31.9 GWh per year. In appliances will result in positive impacts of aggregate demand and thus less fuel con the discussion of Energy Impacts in Chap	d not increasing f old appliance nprovements in due to reduced nsumed by pow	g the number of (s, this program is n the energy effic home energy us	overall applian s expected to r siency of home se, resulting in	reduce reduce reduced
VIII. HAZARDS AND HAZARDOUS MA	TERIALS We	ould the project:		
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				x
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			,	x

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?		· · ·	· · · · · · · · · · · · · · · · · · ·	X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				х
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				x
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				x
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				x
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? <i>Explanation: Refrigerators and room air c</i>				x

Explanation: Refrigerators and room air conditioners contain refrigerants, and all three types of rebated appliances could contain mercury switches in older units and negligible amounts of other materials in the embedded electronics in newer units¹⁰. California has required recycling of major appliances since 1994, and presently recycles upwards of 85% of all discarded appliances (statewide)¹¹. Existing major appliance recycling laws, waste handling laws and common practice successfully addresses the issues raised by these elements¹². California's

¹⁰ "*How to Handle Mercury Switches in Major Appliances*", Fact Sheet published in March 2005 by the Department of Toxic Substances Control.

¹¹ *"Appliance Recycling and Materials Requiring Special Handling*", published May 2004 by the California Research Bureau.

¹² "New Laws for Appliance Recycling", Fact Sheet published in August 2006 by the Department of Toxic Substances Control.

Certified Recycler Program helps to further ensure that recyclers properly recycle California's major appliances. Given that the SEEARP will not increase the overall number of appliances being disposed of in California, the success of California's current appliance recycling program and the programmatic requirement to demonstrate proof of recycling, the program will not have a significant impact on the environment. At most, this program may increase the percentage of appliances properly recycled rather than simply discarded in California.

Also see the discussion of General Impacts in Chapter 3, above.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALIT	Y Would the	project:		
a) Violate any water quality standards or waste discharge requirements?				Х
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which		-		×
permits have been granted)?			_	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?		· ·	-	X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off- site?				×
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?				X
f) Otherwise substantially degrade water quality?	τ.			х

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	x
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			: : : : :	x
j) Inundation by seiche, tsunami, or mudflow?			2	X
water being discharged and requiring trea impact to water quality. Also see the discussion of General Impac X. LAND USE AND PLANNING Would	ots and Energy		- · ·	
a) Physically divide an established		<u> </u>	; 	
community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project		· · ·	. # **	
(including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				×
Explanation: The SEEARP will have no ir specific concerns listed above because n industrial areas and use will occur inside	nanufacturing o	of appliances will		

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact	
XI. MINERAL RESOURCES Would the	e project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X	
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				x	
 Explanation: Given that this program will not increase the overall number of appliances being disposed of in California, the success of California's current appliance recycling program and the programmatic requirement to demonstrate proof of recycling, the program will not have a significant impact on the environment. At most, this program may increase the percentage of appliances properly recycled rather than simply discarded in California making these metals available for re-use. Also see the discussion of General Impacts in Chapter 3, above. 					
XII. NATURAL RESOURCES Would th	ne project resul	It in:		1	
a) Significant increase in the rate of use of any natural resources?			X		
b) Significant depletion of any non- renewable natural resource?			X		
Explanation: The SEEARP will have no significant adverse impact to natural resources or to any of the specific concerns listed above. The program will slightly reduce the rate of use and depletion of natural resources normally consumed in the generation of electricity, and the recycling requirement will help offset the use of natural resources used in appliance manufacturing. See the immediately previous discussion of Mineral Resources, as well as the discussion of General Impacts in Chapter 3, above.					
XIII. NOISE Would the project result in	:			1	
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		,		x	
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?				x	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				x	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				х	
 f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? 			· · ·	x	
Explanation: The SEEARP will have no impact to noise or to any of the specific concerns listed above, because the manufacture of new appliances will occur in existing industrial areas and use will occur inside the home.					
XIV. POPULATION AND HOUSING Would the project:					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			· ·	x	

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?		1. ² .		x
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				x
Explanation: The SEEARP will have no in specific concerns listed above because th existing industrial areas and use will occu XV. PUBLIC SERVICES Would the pro	ne manufacture Ir inside the hc	e of new appliand		
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or				
physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				×
physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the				x
physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection? Police protection?			· · · · · · · · · · · · · · · · · · ·	X X
physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection? Police protection? Schools?	· ·		· · · · · · · · · · · · · · · · · · ·	X X X X
physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection? Police protection?			· · · · · · · · · · · · · · · · · · ·	X X

Explanation: The SEEARP will have no impact to governmental facilities, or the provision of services or impact any of the specific concerns listed above, because the manufacture of new appliances will occur in existing industrial areas and use will occur inside existing homes. The program is unlikely to increase the number of appliances replaced, may only marginally increase the number of appliances recycled, and recycling of replaced appliances will occur through existing programs. See the discussion of General Impacts in Chapter 3, above.

XVI. RECREATION -- Would the project:

a) Increase the use of existing			
neighborhood and regional parks or			
other recreational facilities such that	÷		Х
substantial physical deterioration of the			
facility would occur or be accelerated?			

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	· ·			x
Explanation: The SEEARP will have no in listed above because the manufacture of and use will occur inside the home.	new appliance	s will occur in ex		
XVII. TRANSPORTATION AND TRAFFIC	C Would the	project:)	
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?		* <u>.</u>	X	•
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				х
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?				×
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			: ; ;	Х
e) Result in inadequate emergency access?			;	. X
f) Result in inadequate parking capacity?	-			Х
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				х

shipments to retailers associated with appliance sales nor the transportation of units to recyclers will be significantly affected. As a result, the SEEARP will not affect existing traffic loads. See the discussion of General Impacts in Chapter 3, above.

•	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impaci
XVIII. UTILITIES AND SERVICE SYSTE	MS Would th	e project:	•	
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				Х
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				х
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				x
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				.X.
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers' existing commitments?				x
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?		· · ·		x
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

Explanation: Improvements in the energy efficiency of appliances, increases in the sale of new appliances, or increases in the recycling of old appliances will have no adverse impact to utilities and service systems nor to any of the specific concerns listed above. The recycling component of the rebate program combined with California's existing requirements for the recycling of major appliances and prohibition on their disposal in landfills ensures that there will be no impact on landfills or landfill capacity. Further, the net increase in recycling of old appliances is marginal compared to normal total appliance recycling load and does not rise to the level of creating a significant impact to the State's existing recycling programs, obligations or efforts.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIX. MANDATORY FINDINGS OF SIGN	IFICANCE			
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				X
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			-	x
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?				x
Explanation: The SEEARP will have no adverse impacts of such types that would result in a mandatory finding of significance. The only long-term impact of the program will be the reduction in energy and water demand associated with improvements in energy and water efficiency realized during the lifetimes of the rebated appliances. Improvements in energy efficiency have a positive, not negative, cumulative effect, resulting in reductions in existing adverse effects related to the generation of electrical power. The otherwise temporary nature of the program and its marginal size relative to the natural rate of appliance turnover within the State lead to a lack of cumulatively considerable effects in other areas. See the discussion of General Impacts in Chapter 3, above.				

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CHAPTER 5: Determination

On the basis of this evaluation:

I find that the proposed project WILL NOT have a significant effect on the Х environment, and a NEGATIVE DECLARATION will be prepared. I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. Signing Officer: Melissa Jones, Executive Director, California Energy Commission _Date_////0/09 Signature

APPENDIX A:

See attached "California Appliance Rebate Guidelines: State Energy Efficient Appliance Rebate Program"

APPENDIX B: References

References

California Appliance Rebate Guidelines: State Energy Efficient Appliance Rebate Program, October 30, 2009; Docket # 09-OII-1, available at: <u>http://www.energy.ca.gov/recovery/energystar.html</u>

Financial Assistance Funding Opportunity Announcement: State Energy Efficient Appliance Rebate Program, FOA# DE-FOA-0000119, 49 pages (with appendices), July 14, 2009; Docket # 09-OII-1, available at: <u>http://www.fedconnect.net</u>

California Energy Commission Application to U.S. DOE for Solicitation: DE-FOA-0000119 -State Energy Efficient Appliance Rebate Program, October 14, 2009; Docket # 09-OII-1, available at: <u>http://www.energy.ca.gov/recovery/energystar.html</u>

How to Handle Mercury Switches in Major Appliances, March 2005; available at http://www.dtsc.ca.gov/PublicationsForms/pubs_index.cfm

New Laws for Appliance Recycling, August 2006; available at <u>http://www.dtsc.ca.gov/PublicationsForms/pubs_index.cfm</u>

Appliance Recycling and Materials Requiring Special Handling, May 2004; available at: http://www.library.ca.gov/crb/04/07/04-007.pdf

Appliance Rebate Program Planning Tool for State and Territory Energy Offices, Microsoft Excel file, September 9, 2009; Docket # 09-OII-1, available from the U.S. Department of Energy, <u>http://www.drintl.com/temp/SEOPlanningTool_9Sept2009_v1.0.xls</u>

APPENDIX C: Glossary of Terms

- CO Carbon Monoxide, a gas generated from incomplete combustion processes including fossil fuel combustion. The primary concern is the effect of chronic low emission levels on local air quality, as contrasted with the potential acute health hazard posed by direct inhalation of concentrated CO.
- CO₂ Carbon Dioxide, a gas generated from normal combustion processes including fossil fuel combustion. Primary concern is its effect on global climate change.
- Gigawatt-hour (GWh) One thousand megawatt-hours, or one million kilowatt-hours, or one billion watt-hours of electrical energy.

Kilowatt-hour (kWh) - One thousand watt-hours of energy.

- Megawatt-hour (MWh) One thousand kilowatt-hours, or one million watt-hours of electrical energy.
- NOx Oxides of nitrogen, usually NO and NO₂, which are gases generated from incomplete combustion processes including fossil fuel combustion. Primary concern is as a chief component of air pollution, contributing specifically to ground-level ozone (O₃), smog, and acid rain (through formation of nitric acid).
- PM Solid particulate matter of sizes other than those defined below.
- PM10 Solid particulate matter defined as having a mean aerodynamic diameter of 10 microns or smaller. Generally considered pollutants, particulates are released from combustion processes in exhaust gases including those generated by fossil fuel plants, by mobile sources such as automobiles, and by other fugitive particle sources.
- PM2.5 Solid particulate matter defined as having a mean aerodynamic diameter of 2.5 microns or smaller. Similar in most respects to PM10 but with somewhat different effects on biology and health.
- ROG Reactive organic gases, defined as those gases that will react with nitrogen oxides (NO_x) in the presence of UV radiation to create ozone.
- SOx Sulfur oxides, a group of gases generated from the combustion of sulfur. Trace quantities of sulfur are found in virtually all fossil fuels, and are combusted when the fuels are burned. Primary concern is as the pollutant primarily responsible for acid rain (through atmospheric formation of sulfuric acid)
- TOG Total organic gases, inclusive of reactive organic gases, defined as emissions of hydrocarbon-based gaseous molecules of varied and arbitrary types.

APPENDIX D: Emission Calculations

		Refer	rence Calcula	ations
Energy Savings		31.9 GWh/yr	Source: Doe Planning Sp	preadsheet, http://www.drintl.com/temp/SEOPlanningTool_9Sept2009_v1.0.xls
% of total generation with emmis	• •	44.42%	Source: 2007 IEPR CEC-	100-2007-008-CMF
Energy Savings related to in state	emmissions	14.16998 GWh/yr		
Total State Energy Consumption In state combustibles		•	GWh/yr GWh/yr	Source: http://energyalmanac.ca.gov/electricity/total_system_power.html
Electric Utilities Inventory of Air I	Pollutants http://www.	arb.ca.gov/app/emsinv	v/emssumcat_query.php	?F_YR=2008&F_DIV=-4&F_SEASON=A&SP=2009&F_AREA=CA#stationary
daily 36.54 tons/day	TOG Annual 13337.1 1	ons/yr TOG	per GWh 0.097936	tons/GWh TOG
2.73 tond/day	ROG 996.45 t	ons/yr ROG	0.007317	tons/GWh ROG
36.15 tons/day	CO 13194.75 t	ons/yr CO	0.096891	tons/GWh CO
26.21 tons/day	NOX 9566.65 t	ons/yr NOX	0.070249	tons/GWh NOX
4.4 tons/day	SOX 1606 t	ons/yr SOX	0.011793	tons/GWh_SOX
6.62 tons/day	PM 2416.3 t	ons/yr PM	0.017743	tons/GWh PM
6.17 tons/day	PM10 2252.05 t	ons/yr PM10	0.016537	tons/GWh PM10
5.74 tons/day	PM2.5 2095.1 t	ons/yr PM2.5	0.015385	tons/GWh PM2.5
Greenhouse Gas reduction	http://www.arb.ca.gov/cc/scopingpl	an/document/adopted	_scoping_plan.pdf	

Energy consumption reduction goal for Energy Efficiency in scoping plan	32000 GWh
expected greenhouse reduction	15.2 MMTCO2e
Reduction per GWh	0.000475 MMTCO2e/GWh

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