STATE OF CALIFORNIA — DEPARTMENT OF FINANCE

MAJOR REGULATIONS STANDARDIZED REGULATORY IMPACT ASSESSMENT SUMMARY

DF-131 (NEW 11/13)

STANDARDIZED REGULATORY IMPACT ASSESSMENT SUMMARY

Agency (Department) Name	Contact Person	Mailing Address
California Energy Commission	Soheila Pasha	715 P Street Sacramento, CA 958141
Email Address	Telephone Number	
Soheila.Pasha@energy.ca.gov	(916) 827- 8209	

1. Statement of the need for the proposed major regulation.

The Warren-Alquist Act establishes the California Energy Commission (CEC) as California's primary energy policy and planning agency. Sections 25213, 25218(e), and 25402(c) of the Public Resources Code mandate and/or authorize that the CEC adopt rules and regulations, as necessary, to reduce the inefficient consumption of energy and water by prescribing efficiency standards and other cost-effective measures for appliances whose use requires a significant amount of energy or water statewide. One of the ways the CEC satisfies this requirement is through the Appliance Efficiency Regulations (California Code of Regulations, Title 20, Sections 1601-1609), which contain definitions, test procedures, efficiency standards, and marking and certification requirements for state and federally regulated appliances. Therefore, the CEC proposes standards related to General Service Fluorescent lamps (GSFL).

2. The categories of individuals and business enterprises who will be impacted by the proposed major regulation and the amount of the economic impact on each such category.

Businesses that will be impacted include electrical contractors, hazardous waste disposal services, and manufacturers, retailers, and distributors of GSFLs. Electrical contractors and hazardous waste disposal services are expected to see higher demand for their services with the purchase and replacement of GSFLs. The increase in employment over the projected period (2022-2040) is estimated to be 1,069 jobs and will pay on average about $64,000.

In addition, consumers of GSFLs are expected to be impacted by the proposed regulations when purchasing and/or replacing these lamps, as it is expected that manufacturers will pass on all incremental costs (see direct costs and benefits) to consumers. Consumers will pay about $35 to $74 more to purchase and install a new lamp and to properly dispose of the old fluorescent lamp. However, these consumers, based on the type of compliant lamp they use, will save $56 to $497 over the life of the compliant lamp in electricity spending. The majority of the initial cost goes towards labor for removing or replacing the ballast and installing the new compliant lamp. The initial cost may be significantly lower if replacement lamps are retrofitted into existing lamp sockets as a direct replacement for linear fluorescent lamps without the need to remove or replace the ballast.

California individuals and businesses on average will pay $116 million per year to purchase and install more efficient lamps; however, they will have an average reduced cost of $188 million per year for electricity. Net direct savings to individuals and businesses in the state are expected to be approximately $2.3 billion cumulatively from 2022 to 2040, or $121 million per year. Electric utilities will have lower sales of $3.6 billion over the analysis period of 2022-2040.

3. Description of all costs and all benefits due to the proposed regulatory change (calculated on an annual basis from estimated date of filing with the Secretary of State through 12 months after the estimated date the proposed major regulation will be fully implemented as estimated by the agency).

During the first year after the proposed regulations is fully implemented, the estimated savings are $27.5 million in electricity cost. During the same period, the estimated costs are $122.8 million. In addition, the first-year economic value of avoided emissions from reduced electricity use is $2,832,532.
From 2022 to 2040, residential consumers and businesses will pay $1.2 billion in incremental costs for more efficient lamps (34% is incurred by residential consumers and 66% by businesses). Residential consumers will see electricity bill savings of $972 million over the analysis period. California businesses will see electricity bill savings of $2.6 billion between 2022 and 2040.
Greenhouse gas emissions decline in the electric power sector due to the decreased demand for electricity from GSFLs. Using a low value estimate of $17.71/mtCO2e (CA cap-and-trade auction price), the proposed standard would result in avoided costs of $206 million from 2022-2040. The reduction in electricity demand due to the proposed standard will also reduce the emissions of criteria air pollutants. These avoided emissions are estimated to provide a cumulative public health benefit over the period 2022 to 2040 of $301 million

4. Description of the 12-month period in which the agency estimates the economic impact of the proposed major regulation will exceed $50 million.

All years of the regulations, once implemented, for GSFLs, are estimated to have an economic impact that exceeds $50 million. The economic impact of the standards is evaluated for the period from 2022 to 2040. During the first year after the proposed regulations is fully implemented, the approximate savings are $27.5 million in electricity cost. During the same period, the approximate costs are $122.8 million. In addition, the first-year economic value of avoided emissions from reduced electricity use is $2,832,532.

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5. Description of the agency's baseline:

The CEC collaborated with Evergreen Economics to conduct an analysis of the proposed new performance standards for GSFLs to evaluate the economic impact. Evergreen Economics used the Impact Analysis for Planning (IMPLAN) modeling software to estimate how the proposed standards will affect California residences and businesses. The IMPLAN model generates estimates of total economic impacts to Gross State Product (GSP), employment, business impacts, statewide investment, household income, and environmental impacts.

For the economic impact analysis, the baseline is defined as the energy consumed in the absence of the proposed regulation. The economic impact analysis estimates the economic effects associated with California residences and businesses moving from the baseline to the alternative. It is an economic comparison between the current baseline where the non-compliant lamps are available for purchase in California and the alternative where the non-compliant lamps are not available for purchase.

The baseline for GSFLs energy efficiency, costs, and savings was based upon current market data, as well as expert information from stakeholders, written comments, and staff led workshop. This baseline was developed and is described in the CEC staff report.

6. For each alternative that the agency considered (including those provided by the public or another governmental agency), please describe:

a. All costs and all benefits of the alternative
b. The reason for rejecting alternative

The CEC considered two alternatives to the proposed GSFLs standards:

1. More stringent standards:

a. Incremental costs increase by $1.5 million under the more stringent alternative, but only yield net savings of $1.6 million more annually.

b. The higher stringency alternative delivered a very modest increase in direct gross savings, but at a higher compliance cost, yielding to about the same net benefit to consumers. However, the more stringent alternative may not have technical feasibility and cost effectiveness for all lighting applications. As a result, this alternative was not chosen.

2. Less stringent standards:

a. Incremental costs decline by $28 million under the less stringent alternative, but also yield significantly reduced net savings of $17 million annually.

b. The less stringent alternative does not deliver energy savings that are consistent with the CEC's mandate to achieve cost-effective and technically feasible standards that maximize reduction of the wasteful consumption of energy from appliances that consume a significant amount of energy statewide. As a result, this alternative was not chosen.

7. A description of the methods by which the agency sought public input. (Please include documentation of that public outreach).

On January 19, 2018, the CEC issued an order instituting rulemaking to begin the process of considering efficiency standards, test procedures, labeling requirements, and other efficiency measures to amend the Appliance Efficiency Regulations (California Code of Regulations, title 20, §§1601-1609).

On April 4, 2018, the CEC released an invitation to submit proposals related to efficiency standards, test procedures, and related items for the appliances identified in the invitation to participate.

The CEC actively gathered public input from stakeholders and held public workshops over the past three years.

CEC staff explicitly sought data, alternative proposals, and reactions to draft proposals.

8. A description of the economic impact method and approach (including the underlying assumptions the agency used and the rationale and basis for those assumptions).

The CEC collaborated with Evergreen Economics to conduct an analysis of the proposed new performance standards for GSFLs to evaluate the economic impact. Evergreen Economics used the Impact Analysis for Planning (IMPLAN) modeling software to estimate how the proposed standards will affect California residences and businesses. The IMPLAN model generates estimates of total economic impacts to Gross State Product (GSP), employment, business impacts, statewide investment, household income, and environmental impacts.

Agency Signature	Date
	3/14/22

Agency Head (Printed)

Drew Bohan, Executive Director