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

The regulation is necessary to implement PRC Section 25402(c)(1), which requires the Energy Commission to "prescribe, by regulation, standards for minimum levels of operating efficiency to promote the use of energy efficient appliances whose use, as determined by the commission requires a significant amount of energy on a statewide basis." The proposed general purpose light-emitting diode (LED) and small-diameter directional lamp energy efficiency standards meet this statutory mandate.

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.

Manufacturers are expected to pass on all incremental costs (see lamp costs to consumer and business).
In 2017-2029 residential consumers will pay $262 million in incremental costs for more efficient general purpose LED lamps. However, these consumers will have reduced costs of $16 million for small-diameter directional lamps. Overall, residential consumers will see electricity bill savings of $1.3 billion over the analysis period.
California businesses will pay $7.3 million in incremental costs for more efficient general purpose LED lamps. However, these consumers will have reduced costs of $507 million for small-diameter directional lamps. Overall, California businesses will see electricity bill savings of $3 billion between 2017 and 2029.
Electric utilities will have lower sales of $4.3 billion over the analysis period.

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).

See number 2 for electricity costs and savings. There will also be significant greenhouse gas and air pollution reduction benefits from reducing consumption of electricity. Energy Commission staff estimated the value of reduced air pollution to be between $62 million and $140 million annually over the 2017-2029 period of analysis. Energy Commission staff estimate greenhouse gas emission reductions of 10.3 million metric tons and avoided damages of $373 million over the same period of analysis. Avoided costs of purchasing allowances for the California Cap-and-Trade Program was estimated to be worth $95 million, assuming a $12 per ton allowance value.

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 on January 1, 2017 for general purpose LED lamps and on January 1, 2018 for small-diameter directional lamps, are estimated to have an economic impact that exceeds $50 million. The Energy Commission evaluated the economic impact of the standards 10 years after the standards become fully effective for a period of analysis from 2017 to 2029.

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5. Description of the agency's baseline:

Energy Commission staff utilized the REMI PI+ Model and Department of Finance data for the macroeconomic baseline. The baseline for lamp energy efficiency, costs, and savings was based upon market data and expert information about the efficiency of general purpose LEDs and small-diameter directional lamps today. This baseline was developed and described in the Energy Commission staff report and included extensive stakeholder participation through written comments and staff-led workshops.

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

1) More stringent standards
a) Incremental costs are slightly higher and yields net savings of $270 million more from 2017-2029
b) Levels of efficiency stringency have some technical feasibility barriers and have not been publicly vetted, which would require delaying the rulemaking, and any savings, without significant benefit. Pursuing the more stringent levels could lead to significant delay in the implementation of small-diameter directional lamp and general service LED lamp standards, as the Energy Commission would seek to vet the more stringent standards with stakeholders before proceeding to the formal rulemaking. This delay in itself would cause a loss of the economic benefit characterized for the proposed standards in the assessment.

2) Less stringent standards
a) Incremental cost are slightly less and yields net savings $903 million less from 2017 to 2029
b) These levels of efficiency stringency had lower net benefits. The proposed standards better implement the legislative mandate discussed above.

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

Energy Commission gathered public input from stakeholders and held three public workshops over the past three years, in addition to one-on-one stakeholder meetings. Energy Commission staff explicitly sought data, alternative proposals, and reactions to draft regulations prior to proposing the regulations in a formal rulemaking.

The process can be found here:
http://www.energy.ca.gov/appliances/2013rulemaking/documents/index.html and
http://www.energy.ca.gov/appliances/2014-AAER-01/prerulemaking/documents/index.html.

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 Energy Commission is required under the Warren-Alquist Act to develop cost-effective and technologically feasible standards for appliance energy efficiency; it estimates statewide costs and savings based upon current and projected sales and stock information about appliances as part of its standard rulemaking process. The sources of data and calculations of energy savings are documented in the Energy Commission's draft staff report and will be updated in an upcoming staff report based on stakeholder input This data was used to generate inputs for the REMI PI+ Model (Version 1.7.2). The REMI macroeconomic model was used to generate estimates of impacts to jobs, investment, GDP, personal income, and prices.

| Agency Signature | Date |
|---|---|
| Robert B Weisenmiller | 8/12/15 |

Agency Head (Printed)

Robert Weisenmiller, Chair