

CALIFORNIA ENERGY COMMISSION

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Main website: www.energy.ca.gov
CEC-57 (Revised 1/19)

**PROPOSED NEGATIVE DECLARATION AND INITIAL STUDY FOR GENERAL SERVICE LAMPS APPLIANCE EFFICIENCY RULEMAKING**

Docket No. 19-AAER-04

PROPOSED NEGATIVE DECLARATION**PROJECT NAME AND LOCATION**

This project is a statewide rulemaking proceeding titled General Service Lamps Appliance Efficiency Rulemaking, CEC Docket # 19-AAER-04.

PROJECT PROPONENT

California Energy Commission

PROJECT DESCRIPTION

The project proposes statewide regulations revising the definition for a general service lamp (GSL) and incorporating a federal statutory 45 lumens-per-watt (lpw) minimum efficacy standard for GSLs, complementing the existing 45 lpw minimum efficacy standard in the regulations. For lamps not already covered by California efficiency standards, the proposed regulations and minimum efficacy standard would apply to all general service lamps sold or offered for sale in California on or after January 1, 2020.

The proposed performance regulations do not mandate proprietary technology or equipment. Instead, the proposed regulations require all general service lamps, regardless of light source technology, to meet a minimum efficacy standard. Because low-efficiency lamps, such as incandescent, including halogen, cannot meet this requirement, they would not be lawful for sale or offer for sale in California on or after January 1, 2020. High-efficiency lamps, primarily light-emitting diode (LED) lamps are readily available and currently produced in large volumes by numerous manufacturers.

The proposed regulations incorporate a revised definition for general service lamps (GSLs) and other supplemental definitions from U.S. Department of Energy (DOE) final rules published on January 19, 2017¹, align existing test procedures with new and updated DOE test procedures, and reinstate a severability clause into the regulations. The proposed regulations incorporate the federal minimum 45 lpw efficiency standard for GSLs that exists in federal law and also incorporate it as a state regulation that is

¹ 82 FR 7276 (Jan. 19, 2017) and 82 FR 7322 (Jan. 19, 2017).

identical to the federal law to ensure implementation of the regulations if repealed at the federal level. California has an exemption from state preemption in U.S. Code, Title 42, Section 6295(i)(6)(A)(vi). For lamps not already covered by California efficiency standards, the proposed regulations and minimum efficacy standard would apply to all general service lamps sold or offered for sale in California on or after January 1, 2020.

The proposed regulatory language is available at <https://efiling.energy.ca.gov/getdocument.aspx?tn=229452>, and summarized further in the notice of proposed action available at <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-AAER-04>.

BACKGROUND

The California Energy Commission (CEC) was established in 1974 by the Warren-Alquist Act to develop and implement energy policy for the State of California. One of the CEC's mandates is to promote water and energy efficiency through a variety of means, including efficiency standards for appliances. (Public Resources Code § 25402(c)(1)). The CEC adopted its first appliance efficiency standards in 1976 and has periodically revised those standards, as well as adopted new regulations. The current regulations include provisions on testing of appliances to determine efficiency, reporting of data by manufacturers to the CEC, mandatory minimum efficiency levels, and compliance and enforcement procedures, as well as general provisions on the scope of the regulations and definitions.

The California Environmental Quality Act (CEQA) requires public agencies to identify and consider the potential environmental effects of actions that meet the definition of "project" under the statute, and, when feasible, to reduce any related adverse environmental consequences. Adoption of the proposed regulations 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. (See Pub. Resources Code § 21065.) Therefore, the CEC has prepared this initial study to assess the potential significant effects of the proposed regulations on the environment.

The proposed regulations are meant to ensure utility bill cost savings to the California consumer and lower statewide energy use take place, regardless of potential changes to the requirements for GSLs at the federal level. The federal requirements would save between 2,290 and 4,600 gigawatt-hours of electricity in California the first year the standard is in effect. After existing stock fully turns over, the federal requirements would have an annual electricity savings in California between 4,000 and 13,600 gigawatt-hours. The annual electricity savings equate to a value between \$736 million and \$2.4 billion in annual savings, after stock fully turns over, to California businesses and individuals. No additional energy savings benefits or incremental costs will result directly from the proposed regulations beyond those that would result from federal law and regulations effective January 1, 2020.

Based on the initial study, attached, staff concludes that the regulations will not have a significant impact on the environment, and, in fact, will benefit the environment by resulting in reductions in air pollution. Therefore, a negative declaration is the appropriate environmental document.

All the documents relevant to the propose regulations are available on the CEC's website <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-AAER-04>, or by phone at (916) 654-4147, or by electronic mail from the CEC's Appliances Office, by submitting a request to Angelica.Romo@energy.ca.gov.

ENERGY AND ENVIRONMENTAL IMPACTS OF THE PROPOSED PROJECT

ENERGY IMPACTS

An existing minimum 45 lpm efficacy standard in the California Appliance Efficiency Regulations applies to A-shape lamps (aka light bulbs) manufactured on or after January 1, 2018. Low-efficiency incandescent and halogen lamps are not able to meet this required level of efficacy and cannot lawfully be sold or offered for sale in California. This standard has since been augmented by federal law, which has expanded the definition of GSL to include more appliances subject to the standard; the regulations proposed by the CEC will adopt the federally expanded definition, both memorializing it as an existing federal law, and adopting it as a state regulation identical to the federal law. Thus, if the federal law is ever repealed, the state law will remain in effect and enforceable by California. California has an exemption from state preemption in U.S. Code, Title 42, Section 6295(i)(6)(A)(vi).

The specific benefits from the requirements, whether federal or state, would be utility bill cost savings to the consumer and lower statewide energy use. No additional energy savings benefits or incremental costs will result directly from the proposed regulations beyond those that would result from federal law and regulations effective January 1, 2020. The estimated savings below are those expected to occur in California, due to federal law and regulations effective January 1, 2020, for lamps not already covered by California efficiency standards. The estimated savings are highly dependent on the current population of efficient lamps in California. Because this cannot be known with certainty, a range of savings is estimated between a low population (0 to 20 percent) of efficient lamps and a higher population (30 to 50 percent) of efficient lamps. The federal requirements would save between 2,290 and 4,600 gigawatt-hours of electricity in California the first year the standard is in effect. After existing stock fully turns over, the federal requirements would have an annual electricity savings in California between 4,000 and 13,600 gigawatt-hours. The annual electricity savings equate to a value between \$736 million and \$2.4 billion in annual savings, after stock fully turns over, to California businesses and individuals.

ENVIRONMENTAL IMPACTS

The proposed regulations are meant to ensure reductions in electricity consumption derived from federal requirements will take place regardless of potential changes to GSL requirements at the federal level. The reduced electricity consumption will have a

significant positive impact on the environment through energy efficiency gains and avoiding greenhouse gas emissions and criteria pollutant emissions associated with the generation of electricity from fossil fuels.

The proposed regulations do not mandate proprietary technology or equipment. The proposed regulations require a minimum 45 lpw efficacy level for GSLs sold or offered for sale on or after January 1, 2020. The 45 lpw requirement can only be met with LED lamps or compact fluorescent lamps (CFLs). Although CFLs can meet the proposed requirements, their market share has significantly declined and it is not anticipated to expand due to the proposed regulations.² The main effect of the proposed regulations will be the elimination of sales of incandescent and halogen incandescent GSLs and the increase in sales of LED GSLs. Because LEDs and CFLs have significantly longer lifetimes than incandescent and halogen lamps, the number of failed lamps being disposed of will be reduced under the proposed regulations. No additional environmental benefits, beyond those from the federal requirements, are expected as a result of the proposed regulations.

Because compliant lamps meeting the minimum 45 lpw requirement are already readily available, the proposed regulations are not likely to change industry practice, design, or the material composition of compliant lamps. Environmental impacts from the production of compliant LED lamps were previously analyzed in the CEC's October 2015 *Initial Study and Proposed Negative Declaration for Small-Diameter Directional Lamps and General Service Light-Emitting-Diode (LED) Lamps*.³ That analysis reached the conclusion of no significant effect on the environment and a negative declaration was prepared.

The proposed regulations will lead to improved environmental quality in California by reducing electricity consumption, which will have a significant positive impact on the environment through energy efficiency gains and avoiding greenhouse gas emissions and criteria pollutant emissions associated with the generation of electricity from fossil fuels.

CALIFORNIA NATIVE AMERICAN TRIBAL CONSULTATIONS

The CEC provided invitations for consultation, per Public Resources Code section 210803.1, on the proposed regulations to 164 tribal entities.⁴ No requests for consultation have been received by the CEC.

FINDING OF NO SIGNIFICANT ENVIRONMENTAL EFFECT

The CEC finds that the General Service Lamps Appliance Efficiency Rulemaking will not have any significant adverse effect on the environment. The attached initial study

² See market penetration chart at <https://www.nema.org/Intelligence/Pages/Lamp-Indices.aspx>.

³ Available at <https://efiling.energy.ca.gov/GetDocument.aspx?tn=229652&DocumentContentId=61071>.

⁴ See letters available at <https://efiling.energy.ca.gov/GetDocument.aspx?tn=229428&DocumentContentId=60834>.

supports this finding. This finding and analysis reflects the CEC's independent judgment.

WHERE DOCUMENTS LISTED IN THE NEGATIVE DECLARATION MAY BE VIEWED

The Proposed Negative Declaration, Initial Study, and all documents referenced therein, are available from the California Energy Commission's (CEC's) website at <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-AAER-04>. The documents may also be viewed in person at the CEC at 1516 Ninth Street, Sacramento, California, 95814. The custodian of these documents, and all documents that constitute the record of this proceeding, is Angelica Romo-Ramos, who can be reached at (916) 654-4147 or via email at Angelica.Romo@energy.ca.gov.

INITIAL STUDY

The following is the CEC's analysis of the potential impacts of the proposed project using the initial study environmental checklist.

| | |
|---|---|
| Project Title | General Service Lamps Appliance Efficiency Rulemaking, Docket # 19-AAER-04 |
| Lead Agency/Project Sponsor Name and Address | California Energy Commission, 1516 Ninth Street–MS 25, Sacramento, California, 95814 |
| Contact Person and Phone Number | Patrick Saxton, Appliances Office, Efficiency Division, Patrick.Saxton@energy.ca.gov , (916) 654-4274 |
| Project Location and Environmental Setting | The regulations would be applicable statewide |
| Project Description | The project is a proposal for statewide regulations to incorporate a revised definition for general service lamps (GSLs) and other supplemental definitions from U.S. Department of Energy (DOE) final rules, align existing test procedures with new and updated DOE test procedures, and reinstate a severability clause into the regulations. The proposed regulations incorporate the federal minimum 45 lumen-per-watt (lpw) efficiency standard for general service lamps that exists in federal law and also incorporate it as a state regulation that is identical to the federal law to ensure implementation of the regulations if repealed at the federal level. |
| Responsible Agencies | None |
| Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement) | None |
| Have California Native American Tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? | No |

| | |
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| Names of persons who prepared or participated in the initial study | Patrick Saxton, Senior Electrical Engineer |
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Source: 2019 CEQA Guidelines Appendix G and California Energy Commission

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

Table 2: Potentially Affected Areas

| Potential Positive Impact Determined | Environmental Factor | Potential Positive Impact Determined | Environmental Factor |
|--------------------------------------|--|--------------------------------------|---|
| | I. Aesthetics | | XII. Mineral Resources |
| | II. Agriculture and Forestry Resources | | XIII. Noise |
| X | III. Air Quality | | XIV. Population/Housing |
| | IV. Biological Resources | X | XV. Public Services |
| | V. Cultural Resources | | XVI. Recreation |
| X | VI. Energy | | XVII. Transportation |
| | VII. Geology/Soils | | XVIII. Tribal Cultural Resources |
| X | VIII. Greenhouse Gas Emissions | X | XIX. Utilities/Service Systems |
| X | IX. Hazards & Hazardous Materials | X | XX. Wildfire |
| | X. Hydrology/Water Quality | | XXI. Mandatory Findings of Significance |
| | XI. Land Use/Planning | | |

Source: 2019 CEQA Guidelines Appendix G and California Energy Commission

Evaluation of Environmental Impacts

Table 3 lists specific potential issues for each of the factors presented in Table 2.

Table 3: Specific Potential Issues

| Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| I. AESTHETICS. Except as provided in Public Resources Code Section 21099 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 public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | | | | X |
| d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? | | | | X |
| COMMENT: The proposed regulations will have no impact to aesthetics and no impact on any of the specific concerns listed above. | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: | | | | |
| a) Convert Prime farmland, Unique farmland, or Farmland of Statewide 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) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | | | | X |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | | | | X |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | | | | X |
| COMMENT: The proposed regulations will have no impact to agricultural and forestry resources and no impact on any of the specific concerns listed above. These regulations do not require land, including forest or agriculture land, to convert to other uses. | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | | X |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard? | | | | X |
| c) Expose sensitive receptors to substantial pollutant concentrations? | | | | X |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | | | | X |
| COMMENT: The proposed regulations will have no adverse impact to the air quality concerns listed above. The proposed efficiency standards will result in reduced electricity consumption, which will have a significant positive impact on the environment through energy efficiency gains and avoiding greenhouse gas emissions and criteria pollutant emissions associated with the generation of electricity from fossil fuels. | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | 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 state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | X |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife 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? | | | | X |
| COMMENT: The proposed regulations will have no impact on biological resources and no impact on the specific concerns listed above. The proposed regulations do not require land, including wetlands or habitat, to convert to other uses, either directly or indirectly. | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| <u>V. CULTURAL RESOURCES.</u> Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to in Section 15064.5? | | | | X |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | | | | X |
| c) Disturb any human remains, including those interred outside formal cemeteries? | | | | X |
| COMMENT: The proposed regulations will have no impact on any cultural resources and no impact on any of the specific concerns listed above. The proposed regulations do not require land, including burial grounds or archaeological/paleontological sites, to convert to other uses. | | | | |

| Issues | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| <u>VI. Energy.</u> Would the project: | | | | |
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | | | | X |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | | | | X |
| COMMENT: The proposed regulations are part of state policy to reduce energy consumption through more efficient use of energy through appliance efficiency standards. The proposed regulations would reduce statewide energy consumption by reducing electricity consumption associated with general service lamps. | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| VII. GEOLOGY AND SOILS. Would the project: | | | | |
| a) Directly or indirectly cause 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? | | | | 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 |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | | | | X |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | | | | X |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature? | | | | X |
| COMMENT: The proposed regulations will have no impact to geology and soils and no impact on the specific concerns listed above. The proposed regulations do not require changes to land use that might affect its seismic or stability characteristics. | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| VIII. GREENHOUSE GAS EMISSIONS. Would the project: | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | | X |
| b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | | X |
| COMMENT: The proposed regulations will have no adverse impact to the greenhouse gas emissions concerns listed above and will not result in any greenhouse gas emissions, either directly or indirectly. The proposed efficiency standards will result in reduced electricity consumption, which will have a significant positive impact on the environment through energy efficiency gains and avoiding greenhouse gas emissions and criteria pollutant emissions associated with the generation of electricity from fossil fuels. | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| IX. HAZARDS AND HAZARDOUS MATERIALS. Would 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 |
| 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? | | | | 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 result in a safety hazard or excessive noise for people residing or working in the project area? | | | | X |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | | | | X |
| <p>COMMENT: The proposed regulations will have no impact on hazards and hazardous material. While the proposed regulations may require the use of materials to produce compliant lamps, the regulations do not prescribe their use or require these materials to be used. Compliant lamps are readily available and currently produced in large volumes. Producing additional compliant lamps will not change current industry practice, design, or the material composition of compliant lamps. Environmental impacts from the production of compliant LED lamps were previously analyzed in the CEC's October 2015 Initial Study and Proposed Negative Declaration for Small-Diameter Directional Lamps and General Service Light-Emitting- Diode (LED) Lamps, pp. 2-9. That analysis reached the conclusion of no significant effect on the environment and a negative declaration was prepared. The proposed regulations do not alter the ways in which materials or lamps are disposed.</p> | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| X. HYDROLOGY AND WATER QUALITY. Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | | | | X |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | | | | X |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | X |
| (i) result in substantial erosion or siltation on- or off-site; | | | | X |
| (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; | | | | X |
| (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | | | | X |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | | | | X |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | | | | X |
| COMMENT: The proposed regulations do not require land, including flood zones and drainage, to be altered. The proposed regulations do not alter existing water supply, usage, or discharge. | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| XI. LAND USE AND PLANNING. Would the project: | | | | |
| a) Physically divide an established community? | | | | X |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | | | | X |
| COMMENT: The proposed regulations will have no impact to land use and planning and no impact on any of the specific concerns listed above. The proposed regulations do not require land, including habitat and community development sites, to convert to other uses. The project would not have any effect on, and would be consistent with, existing zoning, plans, and other applicable land use controls. | | | | |
| XII. MINERAL RESOURCES. Would the 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 |
| COMMENT: The proposed regulations will have no adverse impact to mineral resources and no impact on any of the concerns listed above. The proposed regulations do not require land, including mineral-rich land, to convert to other uses. | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| XIII. NOISE. Would the project result in: | | | | |
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | | | X |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | | | | X |
| c) For a project located within the vicinity of a private airstrip or 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? | | | | X |
| COMMENT: The proposed regulations will have no noise impact and no impact on the specific concerns listed above. | | | | |
| XIV. POPULATION AND HOUSING. Would the project: | | | | |
| a) Induce substantial unplanned 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 |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | | | | X |
| COMMENT: The proposed regulations will have no impact on population and housing and no impact on any of the concerns listed above. | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| <u>XV. PUBLIC SERVICES.</u> | | | | |
| a) Would the project 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: | | | | X |
| Fire protection? | | | | X |
| Police protection? | | | | X |
| Schools? | | | | X |
| Parks? | | | | X |
| Other public facilities? | | | | X |
| COMMENT: The proposed regulations will not require the construction or alteration of governmental buildings in a way that will cause significant negative environmental impact. The proposed efficiency standards will result in reduced electricity consumption, which will also result in a reduced need to site and construct new power plants. | | | | |
| <u>XVI. RECREATION.</u> | | | | |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | | X |
| 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 |
| COMMENT: The proposed regulations will have no impact on recreation and no impact on any of the specific concerns listed above. The proposed regulations do not require park or recreational land to convert to other uses. | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| XVII. TRANSPORTATION. Would the project: | | | | |
| a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities? | | | | X |
| b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)? | | | | X |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | | X |
| d) Result in inadequate emergency access? | | | | X |
| COMMENT: The proposed regulations will have no impact on transportation and no impact on any of the specific concerns listed above. | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| <u>XVIII. TRIBAL CULTURAL RESOURCES.</u> | | | | |
| a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | X |
| i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | | | | X |
| ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | | | | X |
| COMMENT: The proposed regulations will have no impact on landscape, sacred places, or objects with cultural value to a California Native American tribe. | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| XIX. UTILITIES AND SERVICE SYSTEMS. Would the project: | | | | |
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | | | | X |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | | | | X |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers' existing commitments? | | | | X |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | | | | X |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | | | | X |
| COMMENT: The proposed regulations will have no adverse impact on any of the concerns listed above. The proposed regulations will have beneficial effects on energy utilities by reducing the need to procure additional electricity generation. The proposed regulations do not require replacement of existing, non-compliant light bulbs and will not increase the rate of solid waste disposal or total solid disposal of non-compliant bulbs. Compliant light bulbs, primarily LEDs, have significantly longer lifetimes than non-compliant bulbs. After the existing stock of non-compliant bulbs is replaced by compliant bulbs, the total amount of solid waste will be reduced because there will be fewer failed bulbs requiring disposal. | | | | |

| Issues | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| <u>XX. WILDFIRE.</u> If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | |
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | | | | X |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | | | | X |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | | | | X |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | | | | X |
| <p>COMMENT: The proposed regulations will have no impact on any of the concerns listed above. Improvements in the efficiency of general service lamps resulting from the proposed standards will result in beneficial environmental impacts including reduced electricity consumption, which will have a significant positive impact on the environment through energy efficiency gains and avoiding greenhouse gas emissions and criteria pollutant emissions associated with the generation of electricity from fossil fuels. Additionally, the reduced electricity consumption is likely to lead to reduced power plant operation and a reduced need to build power plants and power lines in the future. Less electrical infrastructure or reduced use of existing electrical infrastructure may reduce potential wildfire risk.</p> | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| XXI. MANDATORY FINDINGS OF SIGNIFICANCE. | | | | |
| a) Does the project have the potential to substantially 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, substantially 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 |
| COMMENT: The proposed regulations will have no adverse impact on any of the concerns listed above. No potential exists for any adverse impacts on any animal or human populations, and none of the impacts are cumulatively considerable. Improvements in the efficiency of general service lamps resulting from the proposed standards will result in beneficial environmental impacts including reduced electricity consumption, which will have a significant positive impact on the environment through energy efficiency gains and avoiding greenhouse gas emissions and criteria pollutant emissions associated with the generation of electricity from fossil fuels. Additionally, the reduced electricity consumption is likely to lead to reduced power plant operation and a reduced need to build power plants and power lines in the future. | | | | |

Source: 2019 CEQA Guidelines Appendix G and California Energy Commission

SUMMARY OF PROPOSED CHANGES TO APPLIANCE EFFICIENCY STANDARDS AND RESULTING ENERGY AND ENVIRONMENTAL EFFECTS

Table 4 summarizes the proposed changes and the resulting energy and environmental effects for general service lamps.

Table 4: Summary of Proposed Changes

| No. | Existing Standard | Proposed Standard | Energy Effects | Potential Environmental Issues |
|-----|---|---|---|---|
| 1 | There is an existing minimum efficacy standard for A-shape general service lamps. Federal regulations revise the definition for general service lamps and apply an identical minimum efficacy standard to those lamps not already covered by California efficiency standards and that are sold on or after January 1, 2020. | The proposed regulations would memorialize this federal standard and codify it into California law. | None if the federal standard remains in effect. If it is repealed, however, the regulations would save between 4,000 and 13,600 gigawatt-hours of electricity, after existing stock of GSLs fully turns over. | None if the federal standard remains in effect. If it is repealed, however, lower electricity consumption as a result of these regulations will have a significant positive impact on the environment through energy efficiency gains and avoiding greenhouse gas emissions and criteria pollutant emissions associated with the generation of electricity from fossil fuels. |

Source: California Energy Commission

REFERENCES

- California Energy Commission. (August 16, 2019). Initial Statement of Reasons (ISOR) for General Service Lamps. *Docket # 19-AAER-04, TN# 229454*. Retrieved from <https://efiling.energy.ca.gov/getdocument.aspx?tn=229454>
- California Energy Commission. (August 16, 2019). Notice of Proposed Action (NOPA) for General Service Lamps. *Docket # 19-AAER-04, TN# 229453*. Retrieved from <https://efiling.energy.ca.gov/getdocument.aspx?tn=229453>
- California Energy Commission. (August 16, 2019). Proposed Regulatory Language for Appliance Efficiency Regulations for General Service Lamps. *Docket # 19-AAER-04, TN# 229452*. <https://efiling.energy.ca.gov/getdocument.aspx?tn=229452>
- Harinder, S. (October 15, 2015). Initial Study and Proposed Negative Declaration for Small-Diameter Directional Lamps and General Service Light-Emitting- Diode (LED) Lamps. *Docket # 19-AAER-04, TN# 229652*. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=229652&DocumentContentId=61071>
- Saxton, P. (August 3, 2018). Analysis of General Service Lamps (Expanded Scope). *Docket # 19-AAER-04, TN # 229456*. Retrieved from <https://efiling.energy.ca.gov/getdocument.aspx?tn=229456>
- Saxton, P. (August 16, 2019). Supplemental Staff Analysis for General Service Lamps (Expanded Scope). *Docket # 19-AAER-04, TN # 229471*. Retrieved from <https://efiling.energy.ca.gov/getdocument.aspx?tn=229471>

ACRONYMS AND GLOSSARY

| <u>Term</u> | <u>Description</u> | <u>Definition</u> |
|-------------|--------------------------------------|--|
| CEQA | California Environmental Quality Act | A statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. |
| GWh | Gigawatt-hour | One thousand megawatt-hours, or one million kilowatt-hours, or one billion watt-hours of electrical energy. |
| PRC | Public Resources Code | |