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Project Title:	Replacement Pool Pump Motors
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Document Title:	PROPOSED NEGATIVE DECLARATION AND INITIAL STUDY FOR DEDICATED-PURPOSE POOL PUMPS AND REPLACEMENT POOL PUMP MOTORS
Description:	PROPOSED NEGATIVE DECLARATION AND INITIAL STUDY FOR DEDICATED-PURPOSE POOL PUMPS AND REPLACEMENT DEDICATED-PURPOSE POOL PUMP MOTORS RULEMAKING
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CALIFORNIA ENERGY COMMISSION

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**PROPOSED NEGATIVE DECLARATION AND INITIAL STUDY FOR DEDICATED-PURPOSE POOL PUMPS AND REPLACEMENT DEDICATED-PURPOSE POOL PUMP MOTORS RULEMAKING**

Docket No. 19-AAER-02

PROPOSED NEGATIVE DECLARATION**PROJECT NAME AND LOCATION**

This project is a statewide rulemaking proceeding titled Dedicated-Purpose Pool Pumps (DPPP) and Replacement Dedicated-Purpose Pool Pump Motors (RDPPPM) Rulemaking, CEC Docket # 19-AAER-02.

PROJECT PROPONENT

California Energy Commission

PROJECT DESCRIPTION

The project proposes statewide regulations to create energy efficiency standards for RDPPPM. These products are not covered by federal appliance efficiency standards. The required new efficiency standards apply to newly manufactured products sold or offered for sale in California. CEC is also proposing to incorporate existing Federal Appliance Efficiency regulations into California regulation for DPPP.

The proposed regulations apply to RDPPPM and DPPP, manufactured on or after July 19, 2021. These requirements are motor capability standards for RDPPPM and pump capability standard for DPPP and do not mandate any particular technology or component. The variable speed motor and motor efficiency requirements are a capabilities of the motor and may be implemented by various motor technologies. Manufacturers will need to meet minimum motor efficiency standards and prescriptive motor speed control requirements.

The proposed regulations relevant to this initial study are contained in:

Proposed Amendments to Appliance Efficiency Regulations, California Code of Regulations, Title 20, sections 1601 Through 1609, 2019 Appliance Efficiency Rulemaking, Replacement Pool Pump Motors, Docket Number 19-AAER-02.

All the documents listed above are available on the CEC's [website](http://www.energy.ca.gov) <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-AAER-02>, or by phone at (916) 651-2908, or by electronic mail from the CEC's Appliances Office, by submitting a request to [Sean Steffensen](mailto:sean.steffensen@energy.ca.gov) at sean.steffensen@energy.ca.gov. The documents may also be viewed in person at the CEC at 1516 Ninth Street, Sacramento, California, 95814.

BACKGROUND

The 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 to less than significant. 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 establish energy efficiency standards for RDPPPM and DPPP. The proposed regulations would save about 61 gigawatt-hours the first year the standard is in effect. By the year that stock turns over in 2028, the proposed standards would have an annual savings of about 451 gigawatt-hours. This equates to roughly \$82 million in annual savings to California businesses and individuals. The proposal will have a significant positive impact on the environment by reducing the energy required to pump pool water, with an associated reduction in criteria and greenhouse gas emissions.

Based on the initial study, 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-02) <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-AAER-02>, or by phone at (916) 651-2908, or by [electronic mail](mailto:sean.steffensen@energy.ca.gov) from the CEC's Appliances Office, by submitting a request to sean.steffensen@energy.ca.gov.

ENERGY AND ENVIRONMENTAL IMPACTS OF THE PROPOSED PROJECT

ENERGY IMPACTS

The energy efficiency standards being proposed for RDPPPM will reduce future demand for electricity in the state. The proposed standards would take effect July 19, 2021. The estimated energy savings after complete stock turnover in 2028 are 451 gigawatt-hours (GWh) per year, equivalent to \$82 million in annual cost savings.

This reduction will lead to a reduced need for new power plants, reduced use of fossil fuels for those plants, and fewer new transmission lines.

ENVIRONMENTAL IMPACTS

The proposed energy efficiency standards will reduce energy consumption with no significant change in the energy or the process of manufacturing this appliance type. The proposed standards are a performance motor efficiency standard and a prescriptive variable speed capability standard and do not require the use of any specific material to improve the efficiency of the product.

Motor efficiency is the ratio of rotational power at the motor shaft to the electrical power input into the motor. The motor efficiency will always be less than 100 percent due to losses within the motor. Energy losses within electric motors are classified as conduction losses and speed losses. Manufacturers have used a variety of approaches to achieve more efficient motor performance.

Conduction losses are due to the resistance the electric current encounters when it flows through a conductor – in this case, the winding wire inside the motor. The power is dissipated as heat rather than converted into rotational energy. The power dissipated by electrical resistance is proportional to the square of the applied current. Manufacturers have lowered the resistance within the motor by modifying the stator and rotor geometry to add more area for the wire conductors. Electrical losses predominate at low speed. Other sources of motor losses at low speed, such as friction, are small compared to the conduction losses.

Speed losses include hysteresis and eddy currents within the stator and rotor, frictional losses within bearings, and motor windage (the loss the motor rotor encounters as a drag force as it rotates through air). Hysteresis and eddy currents are due to the interaction between alternating electrical currents and magnetic materials within both alternating current induction and electronically commutated motor stators and rotors. Losses can be reduced by minimizing stator and rotor steel laminations to reduce eddy currents and using ferromagnetic materials with properties that present less hysteresis. Bearing friction can be reduced by appropriate selection of bearings for the motor load and speed. Motor windage can be reduced by streamlining airflow within the motor.

Stray losses are miscellaneous losses from leakage flux, nonuniform current distribution, and mechanical imperfection in the air gaps between the rotor and windings stator. Careful design and improved manufacturing processes can minimize stray losses and improve overall motor efficiency.

Variable speed capability is achieved by pairing a motor with a motor drive to vary the speed of the motor through modification of the input motor current, voltage or frequency. The drive makes use of electronic components to perform this function.

Since these improvements are already common practice, updating the energy efficiency of RDPPPM is not likely to change industry practice, the RDPPPM design, or the material composition of these RDPPPM. In addition, the non-hazardous materials found

in the final product do not pose any harm to the user and would not cause a significant environmental impact.

The proposed regulations will lead to improved environmental quality in California. Saved energy from less pool water pumped translates to fewer power plants built and less pressure on the limited energy resources, land, and water use associated with them. In addition, lower electricity consumption results in reduced greenhouse gas and criteria pollutant emissions, primarily from lower generation in hydrocarbon-burning power plants, such as natural gas power plants.

CALIFORNIA NATIVE AMERICAN TRIBAL CONSULTATIONS

Pursuant to Public Resources Code, section 21080.3.1, 18 California Native American tribes have requested formal notice of and information about the CEC's proposed projects in their traditional and culturally affiliated territories. On August 2, 2019, the CEC mailed notification letters to these 18 tribes, informing them of the proposed rulemaking and inviting tribal consultation. In addition, because the proposed rulemaking would be statewide, the CEC mailed notification letters and consultation invitations to all other California Native American tribes (164 tribes in all). To date, the CEC has not received any responses from tribes concerning the proposed rulemaking.

FINDING OF NO SIGNIFICANT ENVIRONMENTAL EFFECT

The CEC finds that the DPPP and RDPPM Appliance Efficiency Rulemaking will not have any significant adverse effect on the environment. The attached initial study 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 [CEC's website](#) at <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-AAER-02>. 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 Sean Steffensen, who can be reached at (916) 651-2908 or via [email](mailto:sean.steffensen@energy.ca.gov) at sean.steffensen@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.

Table 1: Lead and Responsible Agencies

Name	Description
Project Title	Dedicated-Purpose Pool Pumps and Replacement Dedicated-Purpose Pool Pump Motors Rulemaking, Docket # 19-AAER-02
Lead Agency Name and Address	California Energy Commission, 1516 Ninth Street–MS 25, Sacramento, California, 95814
Contact Person and Phone Number	Sean Steffensen, Appliances Office, Efficiency Division, sean.steffensen@energy.ca.gov , (916) 651-2908
Project Location and Environmental Setting	The regulations would be applicable statewide
Project Description	The project is a proposal for statewide regulations to establish the levels of efficiency required for RDPPPM, which are not covered by federal appliance efficiency standards. The required new efficiency standards apply to newly manufactured products and are attainable through normal and existing manufacturing processes.
Responsible Agencies	None
Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement)	None

Name	Description
<p>Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?</p>	<p>No. Pursuant to Public Resources Code, section 21080.3.1, 18 California Native American tribes have requested formal notice of and information about the CEC's proposed projects in their traditional and culturally affiliated territories. On August 2, 2019, the CEC mailed notification letters to these 18 tribes, informing them of the proposed rulemaking and inviting tribal consultation. In addition, because the proposed rulemaking would be statewide, the CEC mailed notification letters and consultation invitations to all other California Native American tribes (164 tribes in all). To date, the CEC has not received any responses from tribes concerning the proposed rulemaking.</p>
<p>Names of persons who prepared or participated in the initial study</p>	<p>Sean Steffensen, Mechanical Engineer</p>

Source: 2018 CEQA Appendix G and CEC

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

For each of the environmental factors checked below, there is likely to be no potentially significant 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

Potentially Significant Impact Determined	Environmental Factor
No	I. Aesthetics
No	II. Agriculture and Forestry Resources
No	III. Air Quality
No	IV. Biological Resources
No	V. Cultural Resources

Potentially Significant Impact Determined	Environmental Factor
No	VI. Energy
No	VII, Geology/Soils
No	VIII. Greenhouse Gas Emissions
No	IX. Hazards & Hazardous Materials
No	X. Hydrology/Water Quality
No	XI. Land Use/Planning
No	XII. Mineral Resources
No	XIII. Noise
No	XIV. Population/Housing
No	XV. Public Services
No	XVI. Recreation
No	XVII. Transportation
No	XVIII. Tribal Cultural Resources
No	XIX. Utilities/Service Systems
No	XX. Wildfire
No	XXI. Mandatory Findings of Significance

Source: 2018 CEQA Appendix G and CEC

Evaluation of Environmental Impacts

Table I through Table XXI list specific potential issues for each of the factors presented in **Table 2**.

I. AESTHETICS.

Except as provided in Public Resources Code section 21099 would the project:

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	No	No	No	Yes
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No	No	No	Yes
c) In non-urbanized area, 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?	No	No	No	Yes
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	No	No	No	Yes

COMMENT: The proposed regulations will have no impact to aesthetics and no impact on any of the specific concerns listed above.

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:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	No	No	No	Yes
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No	No	No	Yes
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))?	No	No	No	Yes
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No	No	No	Yes

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	No	No	No	Yes

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.

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:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	No	No	No	Yes
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?	No	No	No	Yes
c) Expose sensitive receptors to substantial pollutant concentrations?	No	No	No	Yes
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	No	No	No	Yes

COMMENT: The proposed regulations will have no adverse impact to the air quality concerns listed above. The proposed efficiency standards will result in reduced power plant operation and related facility emissions in California as compared to no standards.

IV. BIOLOGICAL RESOURCES.

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	No	No	No	Yes
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?	No	No	No	Yes
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?	No	No	No	Yes
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?	No	No	No	Yes

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No	No	No	Yes
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?	No	No	No	Yes

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.

V. CULTURAL RESOURCES.

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in section 15064.5?	No	No	No	Yes
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?	No	No	No	Yes
c) Disturb any human remains, including those interred outside formal cemeteries?	No	No	No	Yes

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.

VI. ENERGY.

Would the project:

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No	No	No	Yes
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No	No	No	Yes

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 energy consumption by reducing energy consumption associated with the RDPPPM, resulting in a corresponding decrease in the electricity production.

VII. GEOLOGY AND SOILS.

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	No	No	No	Yes
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.	No	No	No	Yes

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Strong seismic ground shaking?	No	No	No	Yes
iii) Seismic-related ground failure, including liquefaction?	No	No	No	Yes
iv) Landslides?	No	No	No	Yes
b) Result in substantial soil erosion or the loss of topsoil?	No	No	No	Yes
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?	No	No	No	Yes
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?	No	No	No	Yes
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?	No	No	No	Yes
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	No	No	No	Yes

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.

VIII. GREENHOUSE GAS EMISSIONS.

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	No	No	No	Yes
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	No	No	No	Yes

COMMENT: The proposed regulations will have no adverse greenhouse gas emissions and will not generate greenhouse gas emissions, either directly or indirectly. The proposed regulations are part of state policy to reduce greenhouse gas emissions and would reduce greenhouse gas emissions by reducing energy consumption associated with RDPPPM, resulting in a corresponding decrease in electricity production, and the greenhouse gases associated with that production, especially natural gas-fired power plants.

IX. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No	No	No	Yes

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	No	No	No	Yes
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No	No	No	Yes
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?	No	No	No	Yes
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?	No	No	No	Yes
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No	No	No	Yes

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No	No	No	Yes

COMMENT: The proposed regulations will have no impact on hazards and hazardous material. While the proposed regulations may yield additional materials to improve the energy efficiency of RDPPPM, the regulations do not prescribe their use or require these materials to be used. The additional material may include various types of metal or plastic. These materials are not new to the manufacturing process of RDPPPM. To meet the minimum motor efficiency requirements, manufacturers may use more copper to lower the electrical resistance in the motor. Manufacturers may add electronic circuits to achieve variable-speed capability. Both changes may require more materials to be used. The proposed regulations also do not alter the way in which these materials are disposed.

X. HYDROLOGY AND WATER QUALITY.

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	No	No	No	Yes
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	No	No	No	Yes

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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:	No	No	No	Yes
(i) result in substantial erosion or siltation on- or off-site;	No	No	No	Yes
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	No	No	No	Yes
(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	No	No	No	Yes
(iv) impede or redirect flood flows?	No	No	No	Yes
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No	No	No	Yes
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No	No	No	Yes

COMMENT: The proposed regulations will not impact hydrology and water quality. The proposed regulations do not require land, including flood zones and drainage, to be altered.

XI. LAND USE AND PLANNING.

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	No	No	No	Yes
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?	No	No	No	Yes

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.

XII. MINERAL RESOURCES.

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	No	No	No	Yes
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?	No	No	No	Yes

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.

XIII. NOISE.

Would the project result in:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	No	No	No	Yes
b) Generation of excessive groundborne vibration or groundborne noise levels?	No	No	No	Yes
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?	No	No	No	Yes

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:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?	No	No	No	Yes
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No	No	No	Yes
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	No	No	No	Yes

COMMENT: The proposed regulations will have no impact on population and housing and no impact on any of the concerns listed above.

XV. PUBLIC SERVICES.

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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:	No	No	No	Yes
Fire protection?	No	No	No	Yes
Police protection?	No	No	No	Yes
Schools?	No	No	No	Yes
Parks?	No	No	No	Yes
Other public facilities?	No	No	No	Yes

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 reduction in energy consumption resulting from these regulations will lead to environmental benefits by reducing greenhouse gas emissions, criteria pollutants, and the need to site and construct new sources of electricity generation.

XVI. RECREATION.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	No	No	No	Yes
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?	No	No	No	Yes

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.

XVII. TRANSPORTATION.

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?	No	No	No	Yes
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	No	No	No	Yes
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No	No	No	No

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Result in inadequate emergency access?	No	No	No	Yes

COMMENT: The proposed regulations will have no impact on transportation and no impact on any of the specific concerns listed above.

XVIII. TRIBAL CULTURAL RESOURCES.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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:	No	No	No	Yes
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	No	No	No	Yes

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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.	No	No	No	Yes

COMMENT: The effects of the proposed regulations would be restricted to pool pump motors that are typically installed in swimming pools. The proposed regulations would not cause ground disturbance or other impacts that could affect tribal cultural resources.

XIX. UTILITIES AND SERVICE SYSTEMS.

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	No	No	No	Yes

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No	No	No	Yes
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?	No	No	No	Yes
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?	No	No	No	Yes
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No	No	No	Yes

COMMENT: The proposed regulations will have no adverse impact on any of the concerns listed above. By reducing electricity use, the proposed regulations will have beneficial effects on energy utilities by reducing the need to procure additional electricity generation, and increased reliability.

XX. WILDFIRE.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No	No	No	Yes
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?	No	No	No	Yes
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?	No	No	No	Yes
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?	No	No	No	Yes

COMMENT: The proposed regulations will have no adverse impact on any of the concerns listed above.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	No	No	No	Yes
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)?	No	No	No	Yes
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	No	No	No	Yes

COMMENT: The proposed regulations will have no adverse impact on any of the concerns listed in the above checklist. No potential exists for any adverse impacts on any animal or human populations, and none of the impacts are cumulatively considerable. Improvements in the energy efficiency of RDPPPM resulting from the proposed standards are likely to result in beneficial impacts including reduced electricity consumption, reduced power plant operation, and reduced need for new sources of electricity generation and power lines in the future.

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

Table 3 summarizes the proposed changes and the resulting energy and environmental effects for RDPPPM.

Table 3: Summary of Proposed Changes

No.	Existing Standard	Proposed Standard	Water and Energy Effects	Potential Environmental Issues
1	There are no existing standards for RDPPPM.	The proposed standards set minimum performance standards for RDPPPM.	The proposed standard for RDPPPM would result in annual savings of 451 GWh per year in 2028.	Lower electricity consumption results in reduced greenhouse gas and other air pollutants.

Source: CEC

REFERENCES

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- Steffensen, S. (2020, February 20). Final Staff Report - Final Analysis of Efficiency Standards Replacement Dedicated-Purpose Pool Pump Motors. *CEC-400-2020-001*. California Energy Commission. TN232151 Retrieved from <https://efiling.energy.ca.gov/GetDocument.aspx?tn=232151&DocumentContentId=64054>

ACRONYMS AND GLOSSARY

Term	Description	Definition
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	Legal code enacted by the California State Legislature pertaining to the public resources of the State of California.
RDPPPM	Replacement Dedicated-Purpose Pool Pump Motor	An appliance type proposed by staff to have minimum energy efficiency standards.
DPPP	Dedicated-Purpose Pool Pump	An appliance type defined by U.S. Department of Energy Appliance Standards to have minimum energy efficiency standards.
CEC	California Energy Commission	The California Energy Commission is the state's primary energy policy and planning agency.