

LOAN REQUEST FORM (LRF)



New Agreement 002-18-ECD (To be completed by CGL Office)

		-	
400 Efficiency Renewable Energy Division	Ron Yasny	23	916-651-2915

City of Hayward	95-6000796
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City of Hayward- Photovoltaic Renewable Energy Phase II Project

	10 / 15 / 2018	04 / 15 / 2020	\$ 2,150,955

ARFVTP agreements under \$75K or minor amendments delegated to Executive Director.

Proposed Business Meeting Date 10 / 3 / 2018 Consent Discussion

Business Meeting Presenter Ron Yasny Time Needed: 5 minutes

Please select one list serve. Financing (Energy Efficiency Financing)

Agenda Item Subject and Description

Proposed resolution adopting California Environmental Quality Act findings for City of Hayward's Photovoltaic Renewable Energy Phase II Project, and approving Agreement 002-18-ECD with City of Hayward. (ECAA funding) Contact: Ron Yasny. (Staff presentation: 5 minutes)

a. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS. Findings that, in addition to the lead agency City of Hayward's Initial Study and Mitigated Negative Declaration, the proposed project presents potentially significant impacts to biological resources and that mitigation measures in addition to those analyzed in the Initial Study and Mitigated Negative Declaration are required to reduce environmental effects to a less than significant level. These additional mitigation measures will be implemented by City of Hayward, and are included as conditions in proposed Agreement 002-18-ECD.

b. CITY OF HAYWARD'S PHOTOVOLTAIC RENEWABLE ENERGY PHASE II PROJECT. Agreement with City of Hayward for a \$2,150,955 loan at one (1) percent interest for photovoltaic system installations at the City's Water Pollution Control Facility. Based on the loan amount, the simple payback is 16.1 years. The project will save approximately \$133,687 annually in electricity costs..

1. Is Agreement considered a "Project" under CEQA?
 Yes (skip to question 2) No (complete the following (PRC 21065 and 14 CCR 15378)):
 Explain why Agreement is not considered a "Project":
 Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because .

2. If Agreement is considered a "Project" under CEQA:
 a) Agreement **IS** exempt. (Attach draft NOE)
 Statutory Exemption. List PRC and/or CCR section number: _____
 Categorical Exemption. List CCR section number: _____
 Common Sense Exemption. 14 CCR 15061 (b) (3)
 Explain reason why Agreement is exempt under the above section:

b) Agreement **IS NOT** exempt. (Consult with the legal office to determine next steps.)
 Check all that apply
 Initial Study Environmental Impact Report
 Negative Declaration Statement of Overriding Considerations
 Mitigated Negative Declaration

Legal Company Name:	Budget
Engie Services US Inc	\$
	\$
	\$

LOAN REQUEST FORM (LRF)

CEC-271 (Revised 01/13)

CALIFORNIA ENERGY COMMISSION



Legal Company Name:

Funding Source	Funding Year of Appropriation	Budget List No.	Amount
ECAA	2018	401.007D	\$2,150,955
ECAA			\$
Funding Source			\$
Funding Source			\$
Funding Source			\$
R&D Program Area:	Select Program Area		\$2,150,955
Explanation for "Other" selection			
Reimbursement Contract #:		Federal Agreement #:	

Name:	Terence Lai	Name:	Suzan England
Address:	777 B St	Address:	3700 Enterprise Av
City, State, Zip:	Hayward, CA 94541-5007	City, State, Zip:	Hayward, CA 94541-5007
Phone:	510-583-4719	Fax:	510-583-3610
Phone:	510-293-5098	Fax:	510-583-4700
E-Mail:	terence.lai@hayward-ca.gov	E-Mail:	Suzan.England@hayward-ca.gov

1. Annual Energy Savings	\$133,687
2. Number of Repay Periods:	repay is based on energy savings

<input type="checkbox"/> Competitive Solicitation	Solicitation #:	PON-13-403
<input checked="" type="checkbox"/> First Come First Served Solicitation		

1. Loan Application	<input checked="" type="checkbox"/>	Attached
2. Budget Detail	<input type="checkbox"/>	Attached
3. CEC 105, Questionnaire for Identifying Conflicts	<input checked="" type="checkbox"/>	Attached
4. Recipient Resolution	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Attached
5. CEQA Documentation	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Attached

Agreement Manager _____

Date _____

Office Manager _____

Date _____

Deputy Director _____

Date _____

**EXHIBIT A
ATTACHMENT 1
BUDGET DETAIL/PROJECT COST AND SAVINGS**

This Loan is made to the City of Hayward (“Borrower”) for an energy savings Project. The Project consists of the energy saving measure listed in Table 1 below to be installed at the City of Hayward, CA.

The Table below summarizes the estimated Project cost, savings and simple payback for the Project.

TABLE 1: Summary of Project Cost and Savings:

Energy Saving Measure	Estimated Total Project Cost	Energy Commission Loan	Estimated Annual Energy Cost Savings	Simple Payback* (Years)
Ground Mounted Photovoltaic System on City Owned property	\$2,150,955	\$2,150,955	\$133,687	16.1

*The simple payback is based on the Loan amount.

The Borrower shall implement the measure listed in Table 1.

If Borrower does not complete the measure or deviates from the quantities and specifications listed in Table 1, the Energy Commission will calculate the maximum Loan amount supported by the Project. The Loan amount will be determined by the lesser of: 1) multiplying the annual energy cost savings by seventeen; 2) total Project cost; or 3) approved Loan amount.

Written documentation is required for any changes to the information included in this Attachment.

If the Borrower has received disbursements exceeding the maximum Loan amount supported by the Project, the Borrower shall refund the difference to the Energy Commission within 30 days of notification.

Memorandum

To: **Robert B. Weisenmiller**
Karen Douglas
David Hochschild
Andrew McAllister
Janea A. Scott

Date : September 12, 2018

From: **Andrea Koch**
Environmental Office
California Energy Commission
1516 Ninth Street
Sacramento CA 95814

Subject: **Energy Commission Staff Review of Final Initial Study/Mitigated Negative Declaration for the City of Hayward's Photovoltaic Renewable Energy Phase II Project (Agreement 002-18-ECD)**

I am an Environmental Planner II in the Siting, Transmission, and Environmental Protection Division of the California Energy Commission. I reviewed the City of Hayward's Final Initial Study/Proposed Mitigated Negative Declaration (IS/MND) for the Photovoltaic Renewable Energy Phase II Project, and it is my opinion that the work to be performed as part of Agreement 002-18-ECD is consistent with the IS/MND. It is also my opinion that implementation of mitigation measures in the IS/MND and the proposed Biological Resources mitigation measure detailed in this staff memo would fully mitigate the potential environmental impacts of the project to a less-than-significant level. The reasons for my conclusions are discussed in the analysis below.

Air Quality

Short-term air quality impacts would result from project construction. Project construction activities, including grading, trenching, and use of construction vehicles and equipment, would result in fugitive dust emissions (e.g., particulate matter) and a slight and temporary increase in other pollutants, such as nitrogen oxides (NOx). The Bay Area Air Quality Management District is designated as a non-attainment area for the state and federal ozone and particulate matter standards (BAAQMD 2018). To ensure that air quality impacts are minimized, Mitigation Measure AQ-1 in the IS/MND requires implementation of a Dust Abatement Program, which includes measures to reduce particulate matter pollution and other vehicular pollution, such as NOx (an ozone precursor). Mitigation Measure AQ-1 also includes measures such as: watering the construction site; covering trucks hauling soil; sweeping the site daily with water sweepers; stabilizing the soil at exposed stockpiles and inactive construction areas; limiting the speed of construction vehicles; installing erosion control measures; washing the tires of construction vehicles prior to exiting the site; properly maintaining construction equipment and requiring that it be equipped with Best Available Control Technology for emission reductions; and requiring all contractors to use equipment that meets the California Air Resources Board's most recent certification standard for off-road heavy-duty diesel engines. Mitigation Measure AQ-1 would ensure that the project's emissions of fugitive dust and other regulated pollutants would remain at a less-than-significant level.

Operation of the facility would produce negligible emissions from approximately 4 annual maintenance-related vehicle trips.

Biological Resources

The project site is located in a fenced area used to air-dry sludge. The disturbed site has minimal vegetation and does not include any sensitive habitats, including wetlands or riparian areas, and no special-status species are known to occur on the site. However, the site is located in close proximity to the shoreline of the San Francisco Bay and East Bay Regional Park District land, including the Cogswell Marsh wetlands, that provide habitat for a variety of native and migratory species, as well as several special-status species. Staff requested that the City of Hayward provide a Biological Resources Assessment Report to discuss these species (SMB 2018).

The primary concern for the project is construction activity disturbance to special-status avian species such as the California Ridgway's rail (*Rallus obsoletus*), western snowy plover (*Charadrius alexandrinus nivosus*), Cooper's hawk (*Accipiter cooperii*), and northern harrier (*Circus hudsonius*), which are known to occur in habitat west of the project site. In addition, native and migratory birds, regardless of any additional conservation status at the local, state, or federal level, are protected by the federal Migratory Bird Treaty Act and California Fish and Game Code (sections 3503 and 3513). This protection extends to nests, nestlings, and eggs of native and migratory birds. While there is limited suitable foraging habitat on site for native and migratory bird species, and no trees or shrubs on site for nesting, there is nesting habitat in areas immediately adjacent to the site, including in scattered trees and shrubs. Birds that nest on the ground on open substrates, such as killdeer, could also nest on or adjacent to the site and potentially be impacted by construction activity, either by direct harm, such as accidental injury or death, or indirect harm, such as disturbance from construction noise.

To ensure that project construction does not disturb any native or migratory bird nesting on or near the site, including killdeer, staff is recommending the addition of a mitigation measure to ensure that the City of Hayward conducts pre-construction surveys for nesting birds and implements avoidance measures if any birds are found. The recommended mitigation is as follows:

- A. If any construction activities will take place during the nesting/breeding season of native or migratory bird species potentially nesting on or near the site (typically February 1st through August 31st in the project region), at least two pre-construction surveys for nesting birds must be conducted prior to any construction activities. These surveys must be separated by at least a 10-day interval and conducted by a qualified biologist who has at least 2 years of avian experience in the geographic area of the project. If active nests are found in areas that could be directly affected by or are within 500 feet of construction, a no-disturbance buffer zone shall be created around active nests during the breeding season and monitored weekly until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them should be determined by the qualified biologist, taking into account factors such as the following:
 - Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity;
 - Distance and amount of vegetation or other screening between the construction site and the nest; and
 - Sensitivity of individual nesting species and behaviors of the nesting birds.

With implementation of staff's proposed mitigation measure, impacts to biological resources from construction activities would be less than significant.

Operating solar facilities can sometimes appear like ponds or lakes, attracting birds and causing collisions with the structures. However, the proposed PV system is a tracker system which rotates and mainly absorbs, rather than reflects, sunlight, so it would not be expected to look like a body of water. The City of Hayward also stated that an existing 1 megawatt tracker PV solar system adjacent to the proposed project has not caused bird collisions. For these reasons, significant bird mortality is not expected from collisions with the PV system.

Cultural Resources

Previous cultural resources studies in the area have not identified historical resources, unique archaeological resources, unique paleontological resources, unique geologic resources, or tribal cultural resources in the project area (Hayward 2018; Meyer and Willis 2017). Studies have also indicated that the proposed project is unlikely to disturb any buried archaeological resources given the deep fill deposits in the area (Lai and England 2018; Meyer and Willis 2017). In addition, local tribes in the area (Costanoan tribes and the Lone Band of Miwok Indians) submitted no comments or concerns when notified by the City of Hayward about the proposed project (Brown 2018; Lai 2018a, 2018b, 2018c, 2018d, 2018e, 2018f, 2018g; Lienert 2018).

Although no cultural resources would be expected to be encountered during project construction, the City of Hayward identified two mitigation measures to ensure protection of any inadvertent discoveries. Mitigation Measure CR-1 requires the cessation of all earthwork within 100 feet of any inadvertent cultural resource discoveries, such as archaeological materials. This mitigation measure describes the actions that the City would take in the event of such a discovery, as well as the steps for a qualified archaeologist to take in assessing the significance of inadvertent discoveries. Mitigation Measure CR-2 requires the cessation of ground disturbance in the event that human remains are encountered during construction, as well as compliance with the human remains treatment provisions contained in the Public Resources and California Health and Safety codes. These mitigation measures would reduce the impacts resulting from such discoveries to a less-than-significant level.

Geology and Soils

Because the site would be graded for drainage, loss of topsoil, or erosion, could occur. Proposed Mitigation Measure WQ-1 in the IS/MND requires that the City prepare a Storm Water Quality Protection Plan for the project, which involves implementation of Best Management Practices (BMPs) for construction activities in accordance with the California Storm Water Best Management Practices Handbook. These BMPs would include procedures for controlling sedimentation and erosion from the construction site, such as: installation of a silt barrier; stabilization of stockpiled soils; post-construction soil stabilization or revegetation; and runoff control.

The project would be located on expansive soils, which could damage pavement and foundations. Proposed Mitigation Measure GEO-1 would minimize the hazards associated with expansive soils by ensuring that all structures and improvements are designed in accordance with applicable guidance for construction on expansive soils in the most recent version of the Uniform Building Code.

Implementation of WQ-1 and GEO-1 would ensure that loss of topsoil and risks from expansive soils would be less than significant.

Hydrology and Water Quality

Any erosion caused by project grading could cause siltation of waters. As discussed previously, proposed Mitigation Measure WQ-1 would mitigate this impact by requiring

construction contractors to follow a Storm Water Pollution Prevention Plan to prevent pollutants, including soil, from entering storm water run-off. With implementation of WQ-1, impacts to water quality would be less than significant.

With the addition of staff's proposed Biological Resources mitigation measure, I agree with the City of Hayward's findings that the proposed project would have no impacts or less-than-significant impacts in all environmental areas.

References

BAAQMD 2018—Bay Area Air Quality Management District. Air Quality Standards and Attainment Status, <http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status#ten>, accessed September 2018.

Brown 2018—Steve Brown. Letter Regarding Sacred Land Files and Native American Contact List Request for the City of Hayward's Proposed Solar Project, Alameda County. SMB Environmental, Roseville, CA. Submitted to Native American Heritage Commission, Sacramento, CA.

ENGIE 2018—ENGIE Services US. *City of Hayward, WPCF Photovoltaic Energy System Phase II Integrated Energy Analysis.* Oakland, CA. Submitted to Public Works Administration, City of Hayward, CA.

Hayward 2018a—City of Hayward. *City of Hayward, Photovoltaic Renewable Energy Phase II Project: Environmental Initial Study/Mitigated Negative Declaration.* January. Utilities & Environmental Services Department, City of Hayward, CA. State Clearinghouse No. 2018012044.

Lai 2018a—Terence Lai. Letter Regarding Request for Government-to-Government Consultation under Assembly Bill 52 (AB-52) for the City of Hayward's Proposed Solar Project. Utilities & Environmental Services Department, Hayward, CA. Submitted to Muwekma Ohlone Indian Tribe of the SF Bay Area, Milpitas, CA.

Lai 2018b—Terence Lai. Letter Regarding Request for Government-to-Government Consultation under Assembly Bill 52 (AB-52) for the City of Hayward's Proposed Solar Project. Utilities & Environmental Services Department, Hayward, CA. Submitted to The Ohlone Indian Tribe, Fremont, CA.

Lai 2018c—Terence Lai. Letter Regarding Request for Government-to-Government Consultation under Assembly Bill 52 (AB-52) for the City of Hayward's Proposed Solar Project. Utilities & Environmental Services Department, Hayward, CA. Submitted to Indian Canyon Mutsun Band of Costanoan, Hollister, CA.

Lai 2018d—Terence Lai. Letter Regarding Request for Government-to-Government Consultation under Assembly Bill 52 (AB-52) for the City of Hayward's Proposed Solar Project. Utilities & Environmental Services Department, Hayward, CA. Submitted to Costanoan Rumsen Carmel Tribe, Pomona, CA.

Lai 2018e—Terence Lai. Letter Regarding Request for Government-to-Government Consultation under Assembly Bill 52 (AB-52) for the City of Hayward's Proposed Solar Project. Utilities & Environmental Services Department, Hayward, CA. Submitted to Amah Mutsun Tribal Band of Mission San Juan Bautista, Woodside, CA.

- Lai 2018f—Terence Lai.** Letter Regarding Request for Government-to-Government Consultation under Assembly Bill 52 (AB-52) for the City of Hayward's Proposed Solar Project. Utilities & Environmental Services Department, Hayward, CA. Submitted to North Valley Yokuts Tribe, Linden, CA.
- Lai 2018g—Terence Lai.** Letter Regarding Request for Government-to-Government Consultation under Assembly Bill 52 (AB-52) for the City of Hayward's Proposed Solar Project. Utilities & Environmental Services Department, Hayward, CA. Submitted to Lone Band of Miwok Indians, Plymouth, CA.
- Lai and England 2018—Terence Lai and Suzan England.** Memorandum Regarding ECCA Loan Application 010-17-ECD - CEQA Questions Responses. June 21. Department of Utilities & Environmental Services, City of Hayward, CA. Submitted to Efficiency Division, California Energy Commission, Sacramento.
- Lienert 2018—Frank Lienert.** Letter Regarding City of Hayward Solar Project, Alameda County. Environmental and Cultural Department, Native American Heritage Commission, West Sacramento, CA. Submitted to SMB Environmental.
- Meyer and Willis 2017—Jack Meyer and Sam Willis.** *Geoarchaeological Study and Monitoring Plan for City of Hayward Recycled Water Project, Alameda County, California.* December. Far Western Anthropological Research Group, Davis, CA. Prepared for Utilities and Environmental Services, City of Hayward, CA.
- SMB 2018—SMB Environmental, Inc.** *Biological Resources Assessment Report: City of Hayward Solar Project.* July 2018. Prepared for the City of Hayward, CA.

Notice of Determination

Appendix D

To:

Office of Planning and Research
U.S. Mail: P.O. Box 3044
Sacramento, CA 95812-3044
Street Address: 1400 Tenth St., Rm 113
Sacramento, CA 95814

County Clerk
County of: Alameda
Address: 1106 Madison Street 1st Floor
Oakland, CA 94607

From:

Public Agency: City of Hayward
Address: 777 B street
Hayward, CA 94541-5007
Contact: Terence Lai
Phone: 510-583-4719

Lead Agency (if different from above):
Address:
Contact:
Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2018012044

Project Title: City of Hayward Photovoltaic Renewable Energy Phase II Project

Project Applicant: City of Hayward

Project Location (include county): 3700 Enterprise Drive, Hayward, CA 94545

Project Description:

The proposed Photovoltaic (PV) Phase II Solar Project is an expansion of the City's existing phase I solar system that was completed in 2010. The proposed 2MW solar PV system will double the energy performance of the existing 1.0MW solar PV system located at Water Pollution Control Facility (WPCF) in Hayward, CA. The proposed additional PV solar energy will be used to further offset city-wide facility usages. The project footprint is about 9 acres and would consist of approximately 6,500 solar panels on top of single axis trackers.

This is to advise that the City of Hayward has approved the above (Lead Agency or Responsible Agency)

described project on 3/6/2018 and has made the following determinations regarding the above described project.

- 1. The project will not have a significant effect on the environment.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures were not made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan was adopted for this project.
5. A statement of Overriding Considerations was not adopted for this project.
6. Findings were not made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:

Hayward City Hall, 777 B Street, Hayward on the First Floor Permitting Center

Signature (Public Agency): [Signature] Title: Director of Utilities & Envir. Services

Date: March 9, 2018 Date Received for filing at OPR:



**CITY OF HAYWARD
UTILITIES & SERVICES DEPARTMENT**

Alameda County Clerk
1106 Madison Street, 1st Floor
Oakland, CA 94607

Subject: Notice of intent to adopt a Mitigated Negative Declaration (MND) for the City of Hayward Photovoltaic Renewable Energy Phase II Project

Dear Sir/Madam,

Please post this letter with the attached Mitigated Negative Declaration and Initial Study for the listed review period to conform to CEQA Guideline 15072.

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

Project Title: City of Hayward Photovoltaic Renewable Energy Phase II Project

Lead Agency: City of Hayward
Utilities & Environmental Services Department
777 B Street, Hayward, CA 94541

Project Location: 3700 Enterprise Drive, Hayward, CA 94545

Project Description: The proposed Photovoltaic (PV) Phase II Solar Project is an expansion of the City's existing phase I solar system that was completed in 2010. The proposed 2MW solar PV system will double the energy performance of the existing 1.0MW solar PV system located at Water Pollution Control Facility (WPCF) in Hayward, CA. The proposed additional PV solar energy will be used to further offset city-wide facility usages through PG&E's Renewable Energy Self-generation Bill Credit Transfer (RESBCT) program and the excess energy will be exported to East Bay Clean Energy. The project footprint is about 9 acres and would consist of approximately 6,500 solar panels on top of single axis trackers. The project will substantially reduce greenhouse gas emissions and offsetting approximately 2,000 tons of CO₂ that would otherwise be emitted from a natural gas power plant each year. The overall construction period is estimated to be 6 months, targeted to start in May 2018, and reach completion by November 2018. There will be some area grading and PV foundation support installation on site that may disturb the soil. However, all construction activities are within fenced WPCF property. There is no substantial finding that the project may have a significant environmental impact.

Mitigated Negative Declaration: Notice is hereby given that the City of Hayward has completed preliminary review of the Environmental Checklist for the Water Pollution Control Facility Combined Heat and Power Cogeneration Project in accordance with the California Environmental Quality Act (CEQA).

Finding: The proposed project will not have significant impact on the environment, however mitigation measures will be incorporated to make sure potential environmental impact will be addressed to less significant. Therefore, the Mitigated Negative Declaration has been prepared.

Hearing Date: The City of Hayward City Council will hear or may take action on this item on Tuesday, March 6th, 2018 at the Hayward City Hall, 777 B Street, Hayward, CA 94541, at 7:00pm.

Review Period: The public review period for the MND is January 26th, 2018 – February 26th, 2018.

Public Comments: Any individual, group, or agency wishing to comment on the project may submit written comments to the City of Hayward at the address listed below. All comments must be received by 5:00 p.m. on Monday, February 26th, 2018.

When submitting a comment, please include the name of a contact person in your agency or organization. Comments may be submitted by mail, e-mail, or fax to the address below:

City of Hayward, Utilities & Environmental Services Department
Attn: Terence Lai, Associate Civil Engineer
777 B Street
Hayward, CA 94541-5007
E-mail: Terence.lai@hayward-ca.gov
Phone: (510) 583-4719
Fax: (510) 583-3610

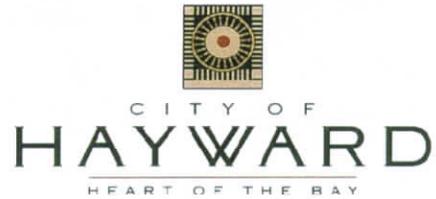
Availability of the Mitigated Negative Declaration: A copy of the Environmental Checklist/Mitigated Negative Declaration is available for review at Hayward City Hall, 777 B Street, Hayward on the First Floor Permitting Center, Monday through Thursday from 8 a.m. to 5 p.m.; at the Hayward Public Library located at 835 C Street and the Weekes Branch Library located at 27300 Patrick Avenue in Hayward. Please see the Library and Community Services webpage at <http://www.library.ci.hayward.ca.us/> for library days and hours.

 1/18/18

Terence Lai
Associate Civil Engineer
Utilities & Environmental Services Department
City of Hayward

 1/19/2018

Alex Ameri
Director of Utilities & Environmental Services
Utilities & Environmental Services Department
City of Hayward



CITY OF HAYWARD

**PHOTOVOLTAIC RENEWABLE ENERGY PHASE II
PROJECT**

Environmental Initial Study/
Mitigated Negative Declaration

January 2018

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List of Abbreviations and Acronyms

AC	Alternating Current
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
CEQA	California Environmental Quality Act
City	City of Hayward
Developer	Selected Design-Build Solar Company (Developer)
DC	Direct Current
EBCE	East Bay Clean Energy
ECAP	East County Area Plan (2002 Alameda County General Plan)
EIR	Environmental Impact Report
GHG	Greenhouse Gas
IS	Initial Study

kW	Kilowatt (one thousand watts)
HARD	Hayward Area Recreation & Park District
MGD	Million Gallons Per Day
MMRP	Mitigation Monitoring and Reporting Plan
MND	Mitigated Negative Declaration
mW	Megawatt (one million watts)
NOx	Nitrous Oxides
RES-BCT	Renewable Energy Self-Generation Bill Credit Transfer
PV	Photovoltaic
SWPPP	Stormwater Pollution Prevention Plan
WPCF	Water Pollution Control Facility

1.0 Introduction

The City of Hayward is located in the San Francisco Bay Area in the southern portion of Alameda County. The City has approximately 158,000 residents. There is a mixture of industrial parks, office parks, commercial areas, golf courses, recreational parks, residential areas, an airport, schools and open space throughout the City. The City has a large and diverse industrial section including food and beverage processors and high-technology manufacturing. The City boundaries extend from the San Francisco Bay on the west to the East Bay hills on the east. Figure 1 illustrates the project location. The City has a Mediterranean coastal climate, with mild dry summers and cool winters. Temperatures vary from average highs in September of 73.5 degrees Fahrenheit (deg F) to average lows in January of 42 degree Fahrenheit. Rainfall averages 18 inches annually with most rain occurring between October and April.

The City owns and operates a wastewater collection and treatment system that serves the City's residents. The Water Pollution Control Facility (WPCF) is rated for an average dry weather flow capacity of 18.5 million gallons per day (mgd) but is currently treating about 11.3 mgd. About 70% of the collected volume comes from residential origin; the remaining comes from commercial and light industrial sources. The WPCF treats incoming wastewater through a trickling filter/solids contact process. Raw sewage is first passed through vacuators for preliminary treatment and then through primary clarifiers prior to secondary treatment. Secondary effluent passes through final clarifiers before being disinfected with chlorine and finally discharged.

The WPCF also uses primary digesters to biologically stabilize solids removed from the treatment process. Solids are thickened using gravity belt thickeners and then air dried in sludge beds prior to landfill disposal. Gas from the digestion process is used to power an internal combustion engine (ICE) to generate energy that more than offsets the plant's energy usage with the excess exported to the grid. A one-megawatt (mW) solar array commissioned in 2010 provides additional energy that is exported to the grid. The cogeneration facility, along with the one-megawatt solar array, produce on average approximately 131% of the plant's total energy demands. The excess energy is exported to the grid and used to offset energy at other City facilities under PG&E's Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT) program.

The City of Hayward is a leader in sustainability being one of the first cities in California to adopt a Climate Action Plan (2009) demonstrating its commitment to environmental protection and sustainability. The City's Climate Action Plan goals are to reduce municipal greenhouse gas emissions by 20% below 2005 baseline levels by 2020. In 2016, the City adopted a resolution establishing that all new municipal buildings, as well as significant retrofits of existing buildings, be zero net energy (ZNE) buildings. By 2025, the City will strive to achieve ZNE for its portfolio of facilities by producing more renewable energy at City facilities, and by increasing renewable energy production at the City's WPCF. The new solar project is key toward reaching the City's goals and efforts to reduce emissions of greenhouse gasses.

1.1 Purpose and Need for Project

The purpose of the Proposed Project is to expand the City's existing 1 MW solar facility by adding an additional 2 MW of generating capacity. There are several drivers as to why the City desires to expand the power generation from solar energy via photovoltaic cells at the WPCF including:

1. Provides the ability to expand the existing renewable energy self-generation bill credit transfer (RES-BCT) program by adding additional benefitting accounts further reducing the reliance on non-renewable energy sources such as energy generated by burning natural gas.

2. Provides the ability to contract with East Bay Community Energy (EBCE) to sell excess clean energy through a power purchase agreement further contributing to the reduction in reliance on fossil fuels county-wide.
3. Contributes substantially to the City's goals to reduce greenhouse gas (GHG) emissions and reach the zero-net energy goal by 2025.

The City plans to construct the new solar facility under a design-build contract, and will own, operate, and maintain the facility following project completion.

1.2 Background on Photovoltaic (PV) and Solar Energy Systems

Photovoltaic (PV) is one of four main types of solar energy technologies. A PV system is made up of different components including PV modules (groups of photovoltaic cells), commonly called PV panels; a charge regulator or controller system; inverters for converting DC energy to alternating current (AC); wiring; and mounting framework. A PV array is a linked collection of PV modules, which are in turn made of multiple interconnected solar cells.

Sunlight is made up of photons, or particles of solar energy. Photons contain various amounts of energy, corresponding to the different wavelengths of the solar spectrum. When photons strike a photovoltaic cell, they may be reflected or absorbed, or they may pass right through. Only the absorbed photons generate electricity. When this happens, the energy of the photon is transferred to an electron in an atom of the photovoltaic cell (which is a semiconductor). With its newfound energy, the electron escapes from its normal position in an atom of the semiconductor material and becomes part of the direct current (DC) in an electrical circuit. DC electricity is then converted by an inverter to alternating current (AC) power for use.

Photovoltaic systems produce power intermittently because they work only when the sun is shining. More electricity is produced on a clear, sunny day and with a more direct light angle, as when the sun is perpendicular to the photovoltaic modules. Cloudy days will reduce output, and no power is produced at night. photovoltaic systems work best during summer months when the sun is higher in the sky and the days are longer. In the style selected for this Project, a single-axis tracking structure will rotate the photovoltaic panels to track the position of the sun for maximum direct exposure. The rows of photovoltaic modules will be arranged such that their drive mechanism gradually rotates the rows of photovoltaic modules throughout the day from an east-facing direction in the morning to a west-facing direction in the afternoon.

2.0 CEQA Process

Pursuant to CEQA, the purpose of an Initial Study (IS) is to:

- Determine whether the project may have a significant effect on the environment. (i.e. whether an EIR or Negative Declaration should be prepared);
- Identify measures that mitigate project impacts to a less than significant level (mitigated negative declaration);
- Define the scope of the EIR, if one is required;
- Justify lead agency's decision to adopt a Negative Declaration, if one is prepared; and
- Determine whether to rely on a previously prepared EIR.

In accordance CEQA, a Mitigated Negative Declaration (MND) shall be prepared if the following criteria are met:

- There is no substantial evidence that the project may have a significant effect; or
- Where there may be a potentially significant effect, revisions to the project would avoid or mitigate the effects to a point where clearly no significant effects would occur.

The IS identified potentially significant impacts, and mitigation measures have been presented that will reduce those impacts to less than significant levels. The City has prepared this draft MND to provide the public, and Responsible and Trustee Agencies reviewing this project, with information about the Project and potential effects on the local and regional environment. This draft MND was prepared in compliance with Section 15070 of the CEQA Guidelines of 1970 (as amended). In accordance with Section 15073 of the CEQA Guidelines, this document is being circulated to local, state and federal agencies and to interested organizations and individuals who may wish to review and comment on the report.

This Document will be available for a 30-day public review period, during which written comments may be submitted to the following address:

Mr. Terence Lai
City of Hayward
3700 Enterprise Avenue
Hayward, CA 94545
Phone: 510.293.5098
Terence.lai@hayward-ca.gov

Responses to written comments received by the end of the 30-day public review period will be prepared and included in the final document to be considered by the City and/or the State Board prior to taking any discretionary decision/action on the Proposed Project.

3.0 Project Description & Construction

3.1 Project Location

Hayward’s WPCF is located at the west end of Hayward, near the east shoreline of San Francisco Bay and a short distance north of Highway 92. The WPCF is separated from the shoreline by East Bay Regional Park District land, known as Cogswell Marsh. Figure 1 shows the regional location, and Figure 2 shows an aerial view of the WPCF and its immediate surroundings.

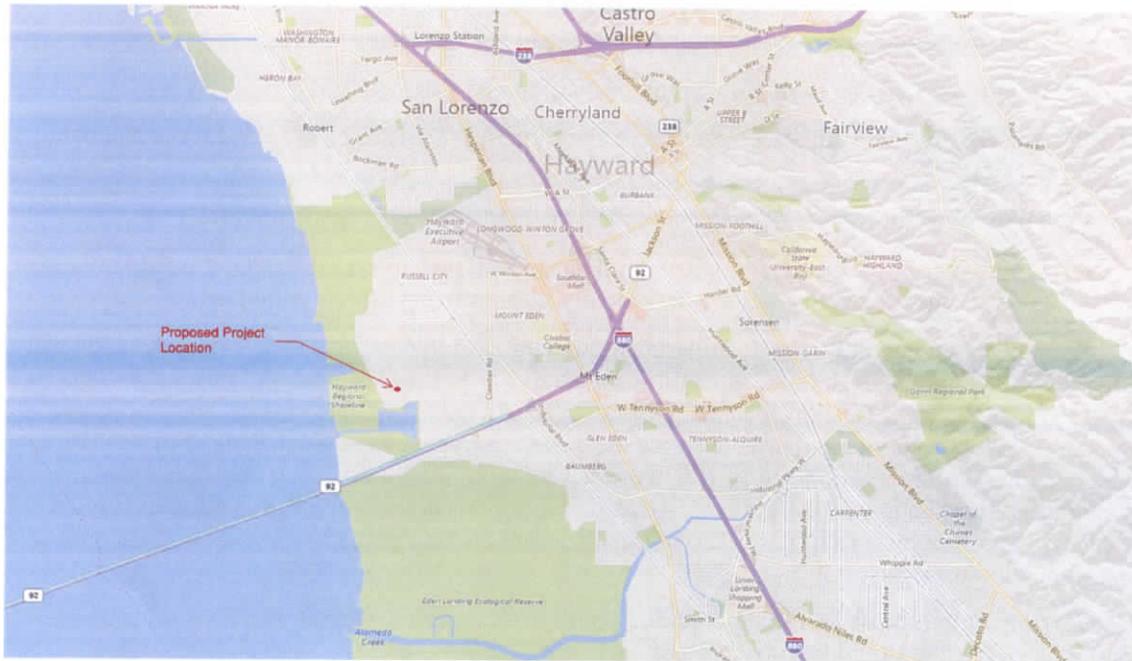


Figure 1. Vicinity Map - Proposed Project Location

The WPCF is a 24/7 operation with personnel on site at all times. The City employs a permanent staff that includes plant operation and maintenance personnel, mechanics, electricians, engineers, and chemists; approximately 10 such workers are on-site daily. The WPCF property is fenced with chain link fencing and locked gates. Public access is restricted without prior authorization.

The WPCF lies within and is surrounded by land zoned by the City of Hayward as Industrial (I). East Bay Regional Parks District lands lie to the west of the WPCF providing a buffer between the WPCF and the San Francisco Bay shoreline. The nearest hiking trail within the park is approximately ¼-mile from the fenced WPCF boundary.



Figure 2. Aerial View of City of Hayward Water Pollution Control Facility (WPCF)

3.2 Proposed Project Description

3.2.1 Project Footprint

The Project will occupy a permanent footprint of approximately 9 acres within the existing WPCF (see Figure 3). An additional 0.25 acres adjacent to the planned solar array area will be used during construction for temporary equipment storage and staging. The height of the new solar array above ground will change throughout the day; the maximum height will be approximately 12-feet above ground at panel full tilt angle.

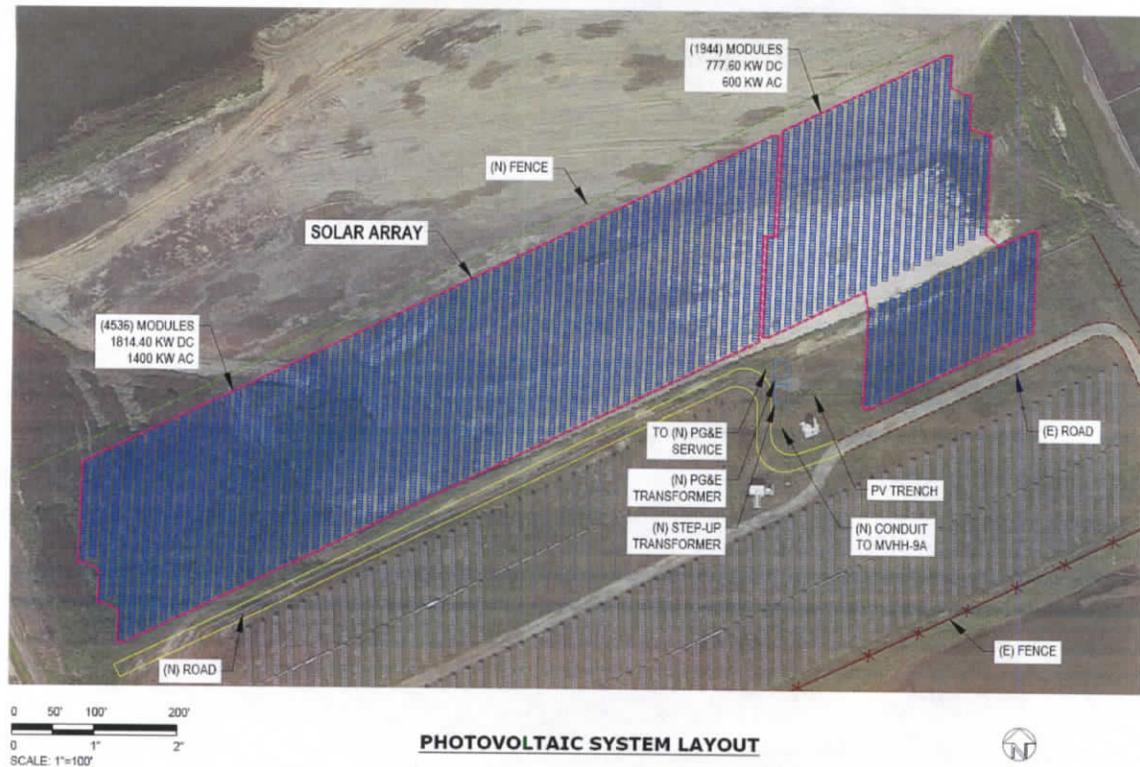


Figure 3. Detailed PV System Layout

3.2.2 System Components

The new solar system will consist of PV panels, transformers to convert the voltage from 480-volt to 12-kV, and inverters to change the amperage from direct current to alternating current. Key design features include the following:

- +/- 52 degree of rotation tilt angle
- Galvanized steel rack structure for PV module supports
- Distributed mechanical single axis tracker system
- Remotely/automatically operated and monitored
- Single axis tracking: East-West
- Seismic-rated
- 90 mph wind loading (non-stowed)

During system operation, inverters and trackers make minimal noise (<65 dBA) while operating, and the balance of system is silent. No new lighting is planned. With proper maintenance, the system will operate for 10 to 20 years or more before requiring major modification or replacement. Figure 4, below, shows the existing single axis photovoltaic system at City of Hayward WPCF site.



Figure 4. Existing 1MW PV Solar Array at the WPCF

3.3 Construction Activities

3.3.1 Project Sequencing and Schedule

Construction of the Proposed Project can commence only after the CEQA document is finalized and approved by the City of Hayward City Council. Construction of the system is planned to begin in the summer of 2018, and will last approximately 6 months. The system is planned to be operational by the end of 2018, with final calibration and site clean-up possibly occurring in January 2019.

The general construction sequence will be as follows (some activities will overlap):

- Site preparation and clearing/grading – 3 weeks
- Underground work (boring, trenching, installing conduit) – 4 weeks
- System installation – 10 to 12 weeks
- Testing – 1 to 2 weeks
- Clean up/restoration – 2 weeks

Construction will be scheduled to minimize impacts to operations at the WPCF. Tie-ins to the existing plant electric power distribution will require temporary shutdown of the plant operations. A standby power engine will be used as required during these tie-ins to maintain treatment systems in operation at all times. Construction will generally be between 7:00 a.m. and 4:00 p.m., Monday through Friday. Work on the weekend is not anticipated.

3.3.2 Site Clearing/Grading and Underground Work

The project site is generally flat and clear of major vegetation, and only requires minor clearing and grading prior to the installation of the photovoltaic system. The project area will be graded to facilitate drainage only, and as such no spoils will be generated. It is anticipated approximately 2,500 cubic yards of soil will be disturbed during the grading operation.

The majority of the underground work (electrical conduit) will be 24” deep. Piles for supporting the solar arrays will be drilled to approximately 8 feet below ground surface. The exact depth will be determined following a geotechnical investigation of the site.

3.3.3 Truck Trips and Haul Routes

There will be approximately 60 large truck deliveries at WPCF over the course of the 5-month construction period, including shipments of modules, inverters and related electrical wiring and balance of system components; concrete deliveries; and construction trailer delivery/pickup.

The WPCF lies road network, to the north, east, and south, lies within a light industrial area where truck traffic is common.

It is anticipated that the major haul route will ingress into the local roads from State Route 92 and egress the same way.

3.3.4 Construction Equipment and Workers

A range of large construction equipment will be used, including:

- bobcats (approx. 2)
- pick-up trucks (approx. 6)
- flatbed delivery trucks (approx. 2)
- small boom crane (approx. 2)
- auger (approx. 1)
- trencher (approx. 1)
- forklift (approx. 1)
- water truck (approx. 1)
- backhoe (approx. 1)
- drills (approx. 2)
- generators (approx. 2)

Additionally, there will be an average of approximately 10 temporary workers over the duration of the Project (ranging from 2 to 20 workers on any given day), all of whom will drive to and park their personal vehicles at the Project site each day.

3.3.5 Post-Construction Site Cleaning and Restoration

Immediately following construction, the construction area will be cleared of all unnecessary construction equipment and debris.

3.4 Operations and Maintenance Activities

The system will operate on 9-acres of land currently being used to store and dry biosolids within the existing wastewater treatment facility. It is expected that, with proper maintenance, the system will last 10-20 years or more before requiring major modification or replacement.

Ongoing, post-construction maintenance activities will include bi-annual system cleaning of the photovoltaic panels, annual mowing and landscaping maintenance, and annual equipment inspection and maintenance. These activities are typically conducted by two to four workers in a period of 4-8 hours. Bi-annual site cleaning may require the use of a water truck and spray hose. Minimal water will be used in panel washing with no runoff anticipated. No hazardous chemicals will be used or stored on site for these activities.

3.5 Permits and Approvals

The Project does not affect the wastewater treatment process at the WPCF and therefore, there will not be a need to modify the City's East Bay Dischargers Authority (EBDA) National Pollution Discharge Elimination System (NPDES) permit.

The Project will not result in any new sources of air pollution and therefore is not subject to Bay Area Air Quality Management District (BAAQMD) permit requirements.

The selected solar design-build company (developer) will need to obtain a building permit, grading permit, and prepare a surface water pollution prevention plan (SWPPP) pursuant to the State's General Construction activity Storm Water Permit Program.

3.6 Schedule

The City prepared and issued a Request for Proposal (RFP) for the WPCF Photovoltaic Energy System Phase II Project on October 30, 2017. The proposed project consists of a minimum 2,000 kW solar system. The City is also pursuing an interconnection agreement with PG&E to expand the existing RES-BCT system with a portion of the new solar array. The remaining portion will be provided under a separate interconnection agreement and will serve EBCE. Following approval of the IS/MND, the City will contract with the developer to begin design of the new solar array. Construction is anticipated to be completed by December 2018.

3.7 No Project Alternative

Under the No Project Alternative, the City's Proposed Project would not be constructed and therefore impacts as a result of this specific Proposed Project as described within this document would not be encountered. For this analysis, it is assumed that the existing baseline condition and the future No Project condition are the same. This No Project Alternative assumes that none of the Proposed Project facilities would be constructed. As a result, the impact description and summary compares the Proposed Project to the No Project. With that said, if the City does not implement the Proposed Project, the reduction in greenhouse gases will not be realized, and the City and County would not benefit from the renewable energy source that would be provided with the Project.

4.0 Environmental Setting

This section provides an overview of key environmental features of the project site. Additional information is included within the topical discussions in Section 5.2.

The proposed project is located within the City of Hayward city limits, Alameda County, California. The City is located along the eastern shore of San Francisco Bay. The physical setting consists of a 1- to 2-mile-wide band of wetlands along the Bay that are often referred to as "baylands", and a flat to gently sloping Bay plain extending about 4 miles from the Bay to the base of the hills to the east. The WPCF is located in the City's West Industrial Corridor, which lies between the open spaces of the baylands to the west and commercial and industrial area of the Bay plain.

Land in the industrial corridor surrounding the WPCF and its ancillary facilities have been developed at varying levels of intensity. Manufacturing facilities, fabrication shops, warehouses, trucking operations, and automotive salvage yards are all located in this Industrial Corridor. Many of the manufacturing and warehouse facilities are housed in relatively new, one-story tilt-up structures surrounded by industrial park-style landscaping.

Although much of the development in the Industrial Corridor is horizontal in character, consisting of one and two-story buildings, there are a number of prominent vertical features as well. Examples are the Russel City Energy Center's power plant, KFAX radio station's four towers, a 180-foot high stack of the Rohm and Haas paint polymer facility, and the trickling filters and the solids handling building at the WPCF.

The proposed solar project will be located next to the existing IMW solar array location about ½-mile from the San Francisco Bay east shoreline. The proposed solar array will be located entirely within the City's WPCF property line. The nearest residential development is about 1-mile to the east of the Project.

The existing treatment plant's facilities and operations occupy about 350 acres of land which have been owned by the City of Hayward for many years and used for sewage treatment and sludge drying operations. The bulk of the treatment plant process area lies within a narrow strip on the north side of Enterprise Avenue. The built-up treatment area is occupied by buildings, treatment structures, and paved surfaces while most of the remainder of the WPCF site are largely occupied by ponds, open channels, and beds for air-drying sludge developed in the treatment process. The ponds were once used for secondary treatment (oxidation ponds), but today are used to capture and retain excessive inflows to the plant. There are two open channels located just east of the proposed solar field. One is used to convey treated effluent to a disinfection station and then onward to the EBDA effluent pump station for final disposal in San Francisco Bay. The other is owned by Alameda Flood Control and conveys storm water runoffs to the Bay. The earthen pond berms are elevated to contain effluent wastewater during wet weather events.

There is very little vegetation on site other than landscape plantings along Enterprise Avenue. Volunteer grasses and forbs provide a ground cover in some areas that have not been recently graded. Some natural vegetation exists within the WPCF, along the pond berms and the open channels. Weed abatement is used to preserve the ability to conduct treatment operation activities. Thus, the amount of vegetation can be considered as sparse in the vicinity of the proposed solar field.

The proposed new solar facilities would be constructed on the existing site in the area that was the southern-most oxidation pond. This pond has been filled in with soils and is currently being used to dry biosolids prior to hauling to a landfill for use as daily cover.

While the plant's surroundings are for the most part industrial in character, it is bordered to the west by marshland. Several large restored wetlands areas are: Cogswell Marsh; Hayward Marsh; and Hayward Area Recreation Department (H.A.R.D.) Marsh. These areas provide significant habitat for a number of special status plant and animal species.

An Interpretive Center owned and operated by H.A.R.D. is located near the end of Breakwater Avenue in the Bay lands. This facility, built in 1986, provides exhibits related to the Bay and Bay land ecosystems. It provides ecological education programs for children, and serves as a staging area for visitors using the network of hiking and biking trails in the adjacent Hayward Shoreline Marsh and Hayward Regional shoreline.

The Interpretive Center building is surrounded by elevated wood decks that provide vantage points for views across the Bay lands. The center and surrounding Bay lands are visited by a moderately large number of people, and the focus of the activities at this location is to observe and appreciate nature. The facility is designed to provide views across the Bay lands and the sensitivity of the view from this observation point can be considered high.

The climate of Hayward is dominated by the San Francisco Bay and sea breezes predominantly from the west. The Bay cools the air with which it comes in contact during warm weather, while during cold weather the Bay warms the air.

The Project is consistent with the City's General Plan.¹ The General Plan notes that the WPCF is to treat wastewaters generated within the City. The PV solar system can be argued to be industrial in that a renewable input is converted to a desired and useful product.

No riparian habitat or wetlands lie within the WPCF property. The nearest major water body to the proposed project and the WPCF is the San Francisco Bay.

The proposed project site and the WPCF is located approximately four miles from the Hayward fault zone and is in an area identified for potential liquefaction.

¹

5.0 Environmental Impacts and Discussion

This chapter evaluates the potential for the Proposed Project/Action to have a significant effect on the environment. Using the CEQA Environmental Checklist Form per the CEQA Guidelines as a framework, the checklist identifies the potential environmental impacts of the Proposed Project/Action pursuant to CEQA. This document compares the Proposed Project/Action against the No Project/Action Alternative as is required by CEQA.

Environmental Impact Designations

For this checklist, the following designations are used to distinguish between levels of significance of potential impacts to each resource area:

Potentially Significant Impact. Adverse environmental consequences that have the potential to be significant according to the threshold criteria identified for the resource, even after mitigation strategies are applied and/or an adverse effect that could be significant and for which no mitigation has been identified. If any resultant potentially significant impacts are identified, an EIR/EIS may need to be prepared to meet CEQA and NEPA requirements, respectively.

Less-than-Significant Impact with Mitigation. Adverse environmental consequences that have the potential to be significant, but can be reduced to less-than-significant levels through the application of identified mitigation strategies that have not already been incorporated into the Proposed Project/Action description.

Less-than-Significant Impact. Potential adverse environmental consequences have been identified. However, they are not so adverse as to meet the significance threshold criteria for that resource. Therefore, no mitigation measures are required.

No Impact. No adverse environmental consequences have been identified for the resource or the consequences are negligible or undetectable. Therefore, no mitigation measures are required.

5.1 Environmental Factors Potentially Affected

The environmental factors checked below may be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following page.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture and Forestry Resources	<input checked="" type="checkbox"/> Air Quality
<input type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input checked="" type="checkbox"/> Geology/Soils
<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Hazards & Hazardous Materials	<input checked="" type="checkbox"/> Hydrology/Water Quality

- Land Use/Planning Mineral Resources Noise
- Population/Housing Public Services Recreation
- Transportation/Traffic Tribal Cultural Resources Utilities/Service System
- Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

Signature _____

Date _____

1/19/2018

5.2 Evaluation of Environmental Impacts

5.2.1 Initial Study Checklist

This checklist follows Appendix G of the CEQA guidelines, with the addition of specific consideration

I. AESTHETICS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion (Aesthetics):

Question a). The proposed project will be located within the existing WPCF property fenced property line (see Figure 3). The collector system will be silver and gray/black in color. The system’s height above ground will change throughout the day; the maximum height will be approximately 16-feet above ground at its full tilt angle.

The sensitive view shed in the project vicinity would be visitors to the marshes of the East Bay Regional Park District marshes and from the H.A.R.D. Interpretive Center located next to Breakwater Avenue. However, the proposed project is within the fence line of the existing WPCF and will be visually consistent with the existing wastewater treatment facility and industrial buildings, particularly to the south of the WPCF along Enterprise Avenue.

The closest public viewpoint of the solar collection system would be from hiking trails within Cogswell Marsh. Because the terrain is relatively flat and the solar panels would be somewhat elevated, the panels would be visible from the hiking trails, as well as from the Interpretive Center. However, for the marshland visitors to see the collectors, they would have to also be oriented to see other structures of the Industrial Corridor. The panels would be a small impact compared to the other in-place features of the Industrial zone including the Russel City Energy Center.

Because of the general industrial nature of the plant site and its surroundings, the installation of the solar panels is not expected to have a significant adverse effect on views in the project area. The project will have a very minor impact upon scenic vista, thus no mitigation is required.

Question b). The Proposed Project is not located near or within a designated state scenic highway and

therefore would not damage scenic resources, including but not limited to trees, outcroppings, and historic buildings within a state scenic highway. The Proposed Project's construction activities would not be located within any area that has been designated as a scenic vista or scenic resource.

Question c). The existing visual character of the project area is industrial. The proposed project would be located on a site consisting of bare graded earth that is used for sludge drying. Processing equipment frequently traverse the site. There are no trees or riparian habitat that will need to be removed for installation and utilization of the solar panels. Therefore, the project does not have the potential to degrade the existing visual character of the site or the surrounding areas.

The only scenic resource is the open marsh land located west of the WPCF. Views from within the marshland to the west would see the open Bay, the San Mateo Bridge, and structural features of the Peninsula. Looking northward, southward, and particularly westward, one would view developed structures, generally low-lying, but also some with vertical perception such as the radio towers and the Russel City Energy Center.

The marshland west of the WPCF cannot be seen from the WPCF built-up area where the treatment processes are located. Thus the proposed solar array cannot interfere or degrade the marsh land view from the WPCF developed area. The pond area is not open to the public and will not have visitors. Thus the solar collectors will not spoil the views into Cogswell Marsh from the East Bay Regional Parks District land.

The solar collection panels will not have a significant impact upon the view shed for the reasons enumerated in Question a, thus no mitigation is required.

No impact is anticipated; thus no mitigation is required.

Question d). The proposed project does not include any new lighting that will affect nighttime views in the area. The photovoltaic panels are designed to absorb and capture sunlight rather than reflect sunlight, and the industry incorporates design features to further reduce reflectivity. Because the tracking structure does not contribute glare, the impact is considered less than significant and no mitigation is required.

Conclusion. The project is visually consistent with the existing industrial uses at the WPCF, and with the adjacent one megawatt solar array. No potentially significant impacts will occur and no mitigation measures are required.

Mitigation Measures. No mitigation measures are required.

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:

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion (Agriculture and Forestry Resources):

Questions a) to e). The proposed project will be located within the WPCF fence line. The proposed project site has been part of the Treatment Plant for over 60 years and is not considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

The project site is not zoned for agricultural use, nor is it under a Williamson Act Contract.

The project does not involve any development that would convert agricultural land to a non-agricultural use, nor interrupt on-going agricultural activity. It thus would not result in the conversion of farmland to non-agricultural use.

The site for the proposed project does not have any trees, therefore will not result in the loss of any forest land.

Conclusion. The proposed project is consistent with the General Plan and will not affect agricultural or

forest resources. It does not contain forest land or is zoned for Timberland Production. Construction and operation of the proposed project will not affect land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. No impacts to agricultural resources, zoning or farmland conversion will occur.

Mitigation Measures. No mitigation measures are required.

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion (Air Quality):

Question a). The proposed project is located within the San Francisco Bay Area Air Quality Management District (BAAQMD), which regulates air pollutant emissions in the nine-county San Francisco the Bay Area including Alameda County. The BAAQMD monitors air quality in the San Francisco Bay Air Basin for carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NOx), sulfur oxides (SOx) and particulates (PM10) pollutants. State and national ambient air quality standards are established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, fine particulates matter and lead. The Bay Area is designated as a nonattainment area for the state and federal ozone standard and for the state Particulate Matter (PM10) standard (particular matter less than 10 microns in size).

The proposed project will not conflict or obstruct the implementation of the applicable air quality plans since no new air pollutant sources will be created. This project will reduce reliance on traditional fossil fuels within the City of Hayward by expanding the RES-BCT program, and within Alameda County by providing energy for use by East Bay Community Energy.

The proposed project involves the construction of photovoltaic panel structures within the WPCF property. The project would not result in population growth; therefore, the project would not conflict with or prevent attainment of the local air quality management plan. In fact, this project will improve air quality because it will produce energy from a renewable resource.

Question b). Construction activities including grading could increase local concentrations of PM10. Fugitive dust emissions including PM10 will be a short-term impact. The amount of grading will be minimal and only to finish grade the site to promote drainage and eliminate ponding. Other than minor amounts of Class 2 aggregate base course for use under concrete foundations and to construct access roads at the new solar array, no additional soil will be brought to the site, nor will any be hauled off for disposal. During grading and trenching activities, the City will implement standard construction Best Management Practices to reduce fugitive dust generation, as identified in **Mitigation Measure AQ-1**.

Construction emissions from equipment use, including carbon monoxide and ozone precursors, are included in the BAAQMD's emission inventory which is used as the basis for the regional air quality plans and therefore construction emissions associated with the proposed project should not impede attainment or maintenance of ozone and carbon monoxide standards in the Bay Area (BAAQMD 1999). Construction of the proposed project would result in temporary emissions from construction vehicles during grading, trenching and while drilling support piers.

Operation of the proposed project will not violate any air quality standards or contribute to existing or projected air quality violations since no new air pollutant sources nor new employee vehicle trips will be created during operation of the facility. There will be no new emission sources associated with the facility. A negligible addition in vehicular traffic to the solar site will occur for routine maintenance (approximately 4 vehicle trips annually).

Question c). The project will not contribute to a cumulative net increase of NOX, PM10 or ozone, criteria pollutants since no new air pollutant sources will be created. The renewable (photovoltaic) project will reduce the City's reliance on traditional energy sources.

As was stated above, due to limited amount of earth-moving activities, use of heavy machinery is not required; thus, the project is not expected to generate construction emissions of NOX, PM10, or ozone precursors in excess of BAAQMD's thresholds, therefore the impact is less than significant and no mitigation is required.

Question d). The proposed project is located about 1.5 miles from the nearest sensitive receptor, a residence to the west of the WPCF. Because of the limited amount of earthwork and no new permanent source of emissions, the project will not expose sensitive receptors to substantial pollutant concentrations, thus no mitigation is required.

Question e). The solar array will not generate any odors that could affect WPCF staff, nearby residents or businesses. The proposed project will not change the way in which the sewage sludge is dried for disposal, and therefore will not generate any objectionable odors. The proposed project would not generate any odor, thus no mitigation is required.

Conclusion. Impacts to air quality are considered less than significant. With the implementation of Mitigation AQ-1, potential impacts to air quality during construction will be reduced to less than significant.

Mitigation Measures. The following mitigation measure is incorporated:

Measure AQ-1. Dust Abatement Program. The City will reduce fugitive dust generation during construction activities. At a minimum, the contractor(s) will be required to implement the following measures (adopted from BAAQMD's CEQA Guidelines for Assessing the Air quality Impact of Projects and Plans for PM10 (1991)). The following construction practices are included in the project and would be implemented during all phases of construction on the project site:

- Water all construction sites with active grading or trenching activities at least twice daily.
- Cover all trucks hauling soil or require all trucks to maintain at least two feet freeboard.
- Apply water three times daily on all unpaved access roads, parking areas, and staging areas at the construction site.
- Sweep daily with water sweepers all paved access roads, parking areas, and staging areas at the

construction site during earthwork activities.

- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand).
- Limit the speed of all construction vehicles to 15 miles per hour while on unpaved road at the project site.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Install wheel washers for all exiting trucks, or wash off the tires and/or tracks of all trucks and equipment used in the unpaved areas before leaving the site.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator
- Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM.
- Requiring all contractors use equipment that meets the California Air Resources Board's (CARB) most recent certification standard for off-road heavy-duty diesel engines.

IV. BIOLOGICAL RESOURCES

Would the project:	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian aquatic, or wetland habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion (Biological Resources):

Question a). No habitat for sensitive, or special status species including threatened and endangered species or candidate species in local or regional plans, policies, or regulations, in Title 14 of the California Code of Regulations, in Title 50 Code of Federal Regulation, or by the California Department of Fish and Game (CDFG) or US Fish and Wildlife Service (USFWS) occurs within the proposed project site or within the WPCF. While the WPCF occurs within the geographic range of several special status species, habitats for these species do not occur on the proposed project site due to the present industrial use of the site (WPCF). The project will be within the WPCF fenced boundary on bare ground largely free of vegetation and without trees, wetlands, or other habitat.

Question b). The proposed project is located within the WPCF fenced property in a bare-ground area used to air dry sludge. This area does not support vegetation or provide wildlife habitat. Vegetation within the WPCF is limited to landscaped areas along Enterprise Avenue and non-native grasses and weedy species. No sensitive habitats including wetlands occur within the WPCF. No riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS occurs within the WPCF and the proposed project site.

The proposed project would be located on a site that has been cleared, graded, and used for various treatment functions in a sustained manner over a period of more than 50 years. There is no sensitive habitat or natural community on this site, thus no mitigation is required.

Question c). No wetlands occur within the fenced WPCF property. Therefore, the project will have no effect on federally protected wetlands as defined by Section 404 of the Clean Water Act.

As described above, there are no federally protected wetlands on the project site, nor is it hydrologically-connected to adjacent wetlands. The proposed project would not involve any direct impacts or substantial adverse affects on such wetlands, thus no mitigation is required.

Question d). The proposed project site is within the fenced WPCF property. The proposed site is disturbed and vegetation is nearly absent and the WPCF is fenced. Therefore, the proposed project, which is within the fence line, will not obstruct or interfere with wildlife corridors or impede the use of wildlife nursery sites. The proposed project would not interfere with the movement, migration, or nursery sites of any fish or wildlife species because there is no suitable habitat of any kind on the proposed site.

Question e). The proposed project site is within the fenced WPCF property. No impacts to biological resources, including mature or heritage trees, will occur. No trees will be removed. There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved habitat conservation plans with which the proposed project could conflict.

Question f). Construction of the proposed project will be within the fenced WPCF property and will not affect wildlife habitats. Therefore, the proposed project will not conflict with any local policies, or ordinances protecting biological resources, or any adopted local, regional, or state habitat conservation plans.

Conclusion. No potentially significant impacts to biological resources are anticipated.

Mitigation. No mitigation measures are required.

V. CULTURAL RESOURCES

Would the project:	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 as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion (Cultural Resources):

Question a).

There are no known historical resources on the project site. The site has been previously used as a wastewater treatment pond as well as a biosolids storage and drying area, and has been cleared and graded on a roughly annual basis for more than 60 years. Thus, there would be no impacts on historical resources from the proposed project.

Question b) and c).

The nearest known archeological resources are Historic Transmission line and Historic Rail Lines which are 0.5 miles and 1 miles away from the project site respectively. No paleontological, archaeological, or unique geologic sites are known to exist within the proposed project site or the WPCF. While it is unlikely that unknown paleontological or cultural resources will be encountered during site preparation grading, the potential for encountering and disturbing known or unknown cultural resources will be minimized with implementation of **Mitigation Measure CR-1**.

Mitigation Measures

Measure CR-1: The following measures will be implemented to minimize potential adverse impacts to unknown cultural resources during construction:

If cultural resources are encountered during construction of the solar array, the contractor shall be directed to avoid any further disturbance of the materials and immediately discontinue earthwork within 100 feet of the find. At that time, the City of Hayward will contact a qualified archaeologist, certified by the Registry of Professional Archeologists (RPA), to evaluate the situation. Any identified archaeological resources shall be recorded by the archeologist on form DPR 422 (archeological sites) and/or DPR 523

(historic properties), or similar forms. Project personnel shall not collect cultural resources. Procedures for stopping construction, in the event that cultural resources are exposed, shall be part of the project plans and documents. If upon discovering cultural deposits, procedures shall be in place so that the contractor can move on to another phase of work, thus allowing sufficient time to evaluate the nature and significance of the find and implement appropriate management procedures.

Question d).

No human remains are known to exist in the project vicinity. However, **Mitigation Measure CR-2** addresses the procedures that will be implemented if human remains are discovered during construction. The potential for encountering and disturbing human remains will be minimized with implementation of this Mitigation Measure.

Measure CR-2: The following measure will be implemented if human remains are unearthed during construction:

In the event that human remains are encountered, ground disturbing activities at that location shall cease immediately, and there shall be no further excavation or disturbance of the site, or any nearby areas reasonably suspected to overlie adjacent human remains, until the County Coroner makes a determination of whether an investigation of the cause of death is required or that the remains are Native American. If the coroner determines that the remains are Native American, then the Native American Heritage Commission in Sacramento shall be contacted within 24 hours (by County coroner), along with the Most Likely Descendant(s) of the deceased Native American (by Native American Heritage Commission), and disposition of the remains shall be in accordance with all applicable laws and regulations.

Conclusion. Impacts to cultural, historical or paleontological resources are unlikely because (1) there are no known resources within the existing WPCF; (2) the minimal amount of earthwork proposed; and (3) the proposed solar array is planned to be constructed on ground that has been disturbed for over 60 years by operations of the WPCF. However, the mitigation measures CR-1 and CR-2 will be followed in the event that such resources are present so as to not be adversely impacted by the Project.

VI. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 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?
- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?
- 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?

Discussion (Geology & Soils):

Question a).

According to the Alquist-Priolo Earthquake Fault Zoning Map, the project site is not located within a Fault Zone, and thus would not be subjected to ground rupture. The Hayward Fault oriented in a southeast-northwest trend is the closest known fault to the project site, passing approximately 4.0 miles to the northeast.

The proposed project is located in the seismically active San Francisco Bay Area, within approximately 2 miles of the Hayward Fault. According to the Working Group on California Earthquake Probabilities, there is a 62 per cent chance of a major earthquake in the Bay Area in the next 30 years, and a 27 per cent chance that that quake will occur along the Hayward Fault. Thus the project site, which is located on land fill, could be subjected to “Very Strong” ground shaking, with “Extremely High” amplification of shaking due to the composition of the fill on which it sits.

According to USGS susceptibility map of the California Geological Survey, the liquefaction potential at the site is moderate to low. The impacts at the project site due to seismic related ground failure due to liquefaction are considered less than significant.

The proposed photovoltaic project will be designed to meet the Uniform Building Code requirements. By its nature, the proposed project will be unlikely to expose people to risk of loss, injury or death from seismic ground shaking or seismic related ground failure.

The project site is located on flat terrain at the interface between the San Francisco Bay and the alluvial plain of the East Bay Hills. As a result, it is not at risk from landslides, and no mitigation is required.

Question b). The proposed project will not involve significant ground disturbance; therefore, the potential for loss of topsoil is low. There will be limited site preparation and grading activities associated with the construction of the Project. Hydrology and Water Quality **Mitigation Measure WQ-1**, will mitigate for erosion and soil loss in the area of disturbance during construction. Therefore, the impact of substantial soil erosion/loss of topsoil will be less than significant, based on the limited area of construction and the erosion / drainage control measures to be implemented during construction.

Question c). Published geologic maps (USGS 1981) and Dibblee (1980) show that older (Quaternary), non-marine alluvial terrace deposits underlie the project site. Subsurface exploration by MWH in July-August 2004 showed that the alluvial material generally consists of dense to very dense sands and gravels, and stiff to hard sandy clays. In addition, the groundwater at the site is relatively deep. Based on these site conditions, the potential for significant ground movements of native alluvial materials is considered less than significant.

In addition, solar array pier foundations will be designed based on a geotechnical investigation and be constructed with supervision of engineers and system designers to insure that the integrity of the system is

not compromised due to underlying soil characteristics. Thus, there will be no impact and no mitigation is required.

Question d)

The soils underlying the project site are expansive, which could damage pavement and foundations associated with the proposed project. In order to minimize the hazardous potential of expansive soils, the following mitigation measure would be implemented.

Mitigation Measure GEO-1: All structures and improvements needed to implement the Photovoltaic Project shall be designed and constructed in accordance with the guidelines for construction on expansive soils of the most current version of the Uniform Building Code.

Question e). The project will not include the installation of septic systems or alternative wastewater systems.

Conclusion. Potential substantial soil erosion or loss of top soil and issues associated with construction on expansive soils are anticipated to be less than significant with the implementation of Mitigation Measures WQ-1 and GEO-1.

Mitigation. Mitigation measures WQ-1 and GEO-1 are required.

VII. GREENHOUSE GAS EMISSIONS

Would the project:	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion (Greenhouse gas Emissions):

Question a-b).

The proposed project consists of construction and operation of photovoltaic solar arrays. Construction would involve transportation of material to the site, minor grading of the site, excavation to install drilled piers, and trench work to install electrical conduits. The emissions of greenhouse gases (GHG) during construction would only last several weeks. The operation of PV solar are typically automatic and only require minimal maintenance activities resulting in approximately 4 additional vehicle trips per year. The proposed 2 MW solar PV system is estimated to offset 3,973,000 pounds of carbon dioxide (a significant contributor to greenhouse gases) that would otherwise be emitted from a natural gas fired power plant each year. Therefore, construction and operation of this project would not result in a net increase of GHG emissions, but would in fact contribute significantly to lowering GHG emissions.

Conclusion. No potentially significant impacts are anticipated.

Mitigation. No mitigation measures are required.

VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion (Hazards and Hazardous Materials):

Questions a), b), and c).

The proposed project will not use, store, emit or transport of hazardous materials.

Question d).

The project site is developed into ponds for treating waste water and adjacent areas are partially constructed to be solar PV area. No underground storage tank (UST) has even been documented. The proposed project sites are in isolated areas would not create a significant hazard to the public or the

environment.

Questions e) and f).

The proposed Photovoltaic Project is located within two miles of the Hayward Airport, and beneath the flight path for the Oakland Airport. New construction associated with the proposed project will not result in a significant intensification of land use or employment density at the site, nor will it result in any light structures or towers taller than those currently found on the site. Therefore, no impacts on aircraft operations are expected.

Question g). The proposed project site is not part of any adopted emergency response plans or emergency evacuation plans. Therefore, no impacts will occur.

Question h). The proposed project is an addition to an existing water treatment facility and will not expose people or structures to wildfires. The proposed project will be isolated from potential wildfires by developed roads and existing ponds. Therefore, no impacts will occur.

Conclusion. No potentially significant impacts.

Mitigation. No mitigation measures are required.

IX. HYDROLOGY AND WATER QUALITY

Would the project:	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
- i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- j) Inundation by seiche, tsunami, or mudflow?

Discussion (Hydrology and Water Quality):

Question a)

Site preparation for the proposed project will require handling of approximately 2,500 cubic yards of native soil materials. Construction activities could result in erosion and siltation via the storm drain system.

In order to mitigate for potential discharges to surface waters associated with rain water, **Mitigation Measure WQ-1** will be implemented. the City will require the construction contractors to follow a Stormwater Pollution Prevention Plan (SWPPP) to prevent the discharge of pollutants to stormwater runoff to the maximum extent practicable by implementing Best Management Practices (BMPs) including installation of silt barriers during construction to avoid erosion and discharge of silty runoff offsite. With implementation of a SWPPP incorporating BMPs, the proposed project will not violate water quality standards resulting from construction activities, and therefore will reduce potential impacts to less than significant.

Question b).

The proposed project consists of installing a photovoltaic system in areas that were previously disturbed and graded, and will not adversely affect groundwater supplies, thus no mitigation is required.

Questions c), d), e).

The proposed project site is elevated some 4 feet above the close-by representative terrain elevation that is outside of the WPCF boundary. The project site will be graded to direct stormwater runoff to existing ponds abutting the north side of the fill where the PV panels will be located. Water in this pond is disposed of by evaporation, and the amount of runoff is not expected to cause the active pond to be overtopped. In the event that the pond approaches over topping, water can be removed via pumping and sent back to the treatment plant for processing. The proposed project will have no impact on the existing drainage patterns at the site, and all stormwater will would be retained on site for storage until dry season when it is removed by evaporation. The proposed project will not change the existing drainage pattern of the area or create an increase in the rate or amount of surface runoff in a manner that could result in flooding on- or off-site, thus no mitigation is required.

Question f). During construction of the proposed project, as described above, a SWPPP will be implemented that employ BMPs to avoid offsite discharges of surface water runoff.

Question g) The proposed project will not create any housing. Therefore, new housing will not be placed in a 100-year flood hazard zone.

Question h). The proposed project will be sited within the area identified as base flood elevation determined where special flood hazard areas subject to inundation by the 1% annual chance flood. All

electrical components of PV panels and electrical equipment will be elevated 2 feet above the flood plain. The proposed project does not include facilities that will cause flooding, or affect levees or dams. Therefore, the project will not impede or redirect 100-years flows, therefore no impacts on the 100-year flood will occur.

Question i). The proposed project is not associated with any levees or dams whose failure could subject people or structures to loss as a result of flooding, therefore, no mitigation is required.

Question j). Because of its location, the proposed project would not be at risk for seiche or mudflows. The existing treatment plant and the proposed project site are potentially at risk from a tsunami, however the tsunami risk at this area inside the Bay are similar to the risks from major flood events. The built-up area associated with the solar array would also protect against tsunami inundation, thus no mitigation is required.

Conclusion. With implementation of the mitigation measure below, potential impacts to hydrology and water quality will be reduced to a less than significant level.

Mitigation Measures.

Measure WQ-1: Stormwater Pollution Protection Plan (SWPPP). The contractor will be required to obtain coverage under the State Water Resources Control Board (SWRCB) General Permit for Storm Water Discharges Associated with Construction Activity (Construction General Permit (GCP) prior to commencing construction activities. The SWPPP will incorporate Best Management Practices (BMPs) for construction activities as appropriate in the Stormwater Best Management Practice Handbook (California Stormwater Quality Association) current edition and/or the Manual of Standards for Erosion and Sediment Control Measures (ABAG 1995). The BMPs include measures for management and operation of the construction site to control and minimize the potential contribution of pollutants to storm runoff from these areas. These measures address procedures for controlling erosion and sedimentation and management all aspects of the construction to ensure control of potential water pollution sources.

Erosion and sediment control practices include:

- installation of silt barrier
- stabilize stockpiled soils
- post construction stabilization or revegetation
- runoff control

The City will prepare a site-specific Stormwater Pollution Prevention Plan (SWPPP) and will require the construction contractor to incorporate the measures into all aspects of the project.

X. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the LARDP, general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Discussion (Land Use and Planning):

Question a). The proposed project is located at the WPCF and is not surrounded by a community. The proposed project will be limited to construction and operation of a photovoltaic system within the existing WPCF fence line. Construction and operation of the proposed project will not physically divide an established community including residential, commercial or industrial uses, therefore no mitigation is required.

Question b). The WPCF lies within Hayward’s city limits and is consistent with the City’s General Plan, thus no mitigation is required.

Question c). There are no applicable habitat conservation or natural community conservation plans that apply to the project site, thus no mitigation is required.

Conclusion. No potentially significant impacts.

Mitigation. No mitigation measures are required.

XI. MINERAL RESOURCES

Would the project:	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion (Mineral Resources):

Questions a) and b). The project site is not designated as a locally-important mineral resource recovery site in any local plans, therefore no mitigation is required.

Conclusion. No potentially significant impacts.

Mitigation. No mitigation measures are required.

XII. NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion (Noise) :

Questions a), b), c) and d). Noise generated at the proposed project and immediate vicinity is mostly from the existing WPCF equipment where noise levels are low and to a lesser extent noise from traffic along Highway 92 located some ¾-mile south of the treatment plant. Residences to the east are at least 1.5 miles from the project.

Construction of the proposed project could result in temporary increases in ambient noise levels in the project vicinity such as when excavating trenches, grading, or when driving piers into the ground. The closest sensitive receptors are more than one mile from the project site; the surrounding land uses are all industrial. Thus there would be no significant impacts from construction noise.

Once constructed, the project will not generate any audible noise, nor generate groundborne vibration or noise levels.

Question e) and f). The proposed project is located within two miles of the Hayward Airport, and within the airport land use plan referral area of the Oakland Airport. However, the proposed project would not increase the number of people exposed to aviation-related noise because it includes no housing, and would not generate any new jobs, thus no mitigation is required. The proposed project is not within the vicinity of a private airstrip.

Conclusion. No potentially significant impacts.

Mitigation. No mitigation measures are required.

XIII. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion (Population and Housing):

Question a), b), and c). The proposed project will not result in population growth either directly or indirectly as it does not include construction of homes, businesses, or related infrastructure. The proposed project will not displace any existing housing or any people requiring construction of replacement housing.

Conclusion. No impact.

Mitigation. No mitigation measures are required.

XIV. PUBLIC SERVICES

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:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion (Public Services):

Question a). There will be no increase in the existing WPCF staff levels, nor any increase in the treated water service levels provided by City as a result of this Project. Therefore, no increases are expected in the demand for the public services that support new residents, schools, utilities, parks, fire or

police protection. In addition, the proposed project will be within the fenced and secured location that already exists for the WPCF, therefore there will be no increase in the demand for police and fire protection onsite.

Conclusion. No potentially significant impacts.

Mitigation. No mitigation measures are required.

XV. RECREATION

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion (Recreation):

Question a). Project construction will occur within the WPCF fence line, and will not affect existing neighborhoods or regional park areas or usage of those areas. The proposed project will not generate new jobs, housing or visitors, so it will not increase the use of existing neighborhood or regional parks or result in their deterioration

Question b). The proposed project would neither create new recreational facilities nor require the construction or expansion of existing recreational facilities.

Conclusion. No potentially significant impacts.

Mitigation. No mitigation measures are required.

XVI. TRANSPORTATION / TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

- e) Result in inadequate emergency access?

- f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Discussion (Transportation and Traffic):

Questions a) and b). Construction of the proposed project will involve a minor temporary increase in traffic during the 6-month construction period. The increase in vehicle trips will be associated with deliveries of construction materials and equipment (a total of approximately 40 large truck deliveries over 6 months), and construction worker daily trips to and from the construction site (an average of approximately 10 daily). The project does not include hauling of soil to or from the site. The temporary increase in vehicle trips will not cause long term degradation in level of service of roadways used for access to the WPCF.

Construction traffic will likely access the project via Highway 92 and then use local roads to access the plant. The amount of vehicle trips generated during construction is minimal in comparison to the existing traffic loads.

Various maintenance activities will take during operations, totaling approximately 4 round trip vehicle trips annually. There will not be an increase in on-site workers as a result of this project.

As described above, the proposed project will not significantly increase trip generation, so it will not exceed the level of service standards established by the Alameda County Transportation Commission’s Congestion Management Program.

Question c). Although the proposed project is within or near the flight path of both the Oakland and Hayward Airports, it will not have any impact on air traffic patterns.

Question d). The proposed project will not alter the existing paved two-lane access road to the WPCF site, and no modifications are proposed. On-site, the project will not increase existing traffic hazards.

Question e). Emergency access to and within the WPCF will not be affected by the proposed project.

Question f). As there are no proposed improvements off-site, the proposed project would not conflict with any adopted policies, plans or programs regarding alternative transportation such as bus turnouts or bicycle racks.

Conclusion. No potentially significant impacts.

Mitigation. No mitigation measures are required.

XVII. TRIBAL CULTURAL RESOURCES

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:

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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- a) 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
- b) 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.

Discussion (Transportation and Traffic):

Questions a) and b). There are no known historical resources located at the project site. The site has been previously under industrial use for more than 60 years and no known resource of tribal cultural resource was found previously. Therefore, no mitigation is required.

Conclusion. No potentially significant impacts.

Mitigation. No mitigation measures are required.

XVIII. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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 provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

g) Comply with applicable federal, state, and local statutes and regulations related to solid waste?

Discussion (Utilities and Service Systems):

Questions a) through g). The proposed project will not induce population growth and therefore, will not increase the volume of wastewater or solid waste, or increase the demand for potable water. The proposed project will not increase the amount of storm water runoff on the plant site, and therefore would not necessitate expanding any storm water conveyance, or storage facilities.

The existing pond just north of the proposed solar array will capture all storm water runoff *generated* from additional impermeable surfaces (e.g., solar panels, equipment pads) would be retained on site. Thus the project will not require the construction or expansion of storm water facilities on site, thus no mitigation is required.

Water for the proposed project will be provided to clean the PV module surfaces in order to retain optimal solar energy performance. Water will be provided from the City’s water distribution system. Annual demand is expected to be less than five-thousand gallons.

Conclusion. No potentially significant impacts.

Mitigation. No mitigation measures are required.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

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)?

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Discussion (Mandatory Findings of Significance):

Question a). While the proposed project has the potential to degrade the quality of the environment in terms of air quality, cultural resources, and water quality, with implementation of the mitigation measures included in Section 5, all potentially significant adverse impacts will be reduced to a less-than-significant

level. No adverse impacts to plants, fish or wildlife habitat or species will occur. No impacts that will eliminate important examples of the major periods of California history or prehistory will be associated with the proposed Project.

Question b). The proposed project is not expected to create incremental effects that will result in a considerable contribution to cumulative impacts since adverse construction impacts will be short term and mitigated and there will be no long term impacts associated with the proposed project.

Question c). The proposed project will have adverse impacts on human beings without implementation of mitigation measures. Adverse impacts include short-term potential degradation of local air quality and water quality from construction activities, and a small short-term increase in construction traffic. These impacts will be minor and temporary, and are not considered significant. Implementation of the mitigation measures identified above and included in Section 6 will reduce all potential significant adverse impacts to a less-than-significant level.

6.0 Mitigation Monitoring and Reporting Plan

A mitigation monitoring and reporting plan (MMRP) follows.

Table 1. Mitigation Monitoring and Reporting Plan

<u>Mitigation Measure</u>	<u>Implementation Procedure</u>	<u>Monitoring and Reporting Actions</u>	<u>Monitoring Responsibility</u>	<u>Monitoring Schedule</u>
<p>Measure AQ-1. Dust Abatement Program. City will reduce fugitive dust generation during construction activities. At a minimum, the contractor(s) will be required to implement the following measures:</p> <ul style="list-style-type: none"> • Water all construction sites with active excavation at least twice daily. • Cover all trucks hauling soil or require all trucks to maintain at least two feet freeboard. • Apply water three times daily, or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites. • Sweep daily with water sweepers all paved access roads, parking areas, and staging area at construction sites during earthwork activities. • Hydrated or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more). • Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand). • Limit the speed of all construction vehicles to 5 miles per hour while on unpaved road at the project site. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways. • Install wheel washers for all exiting trucks, or wash off the tires and/or tracks of all trucks and equipment used in the unpaved areas before leaving the site. • Install wheel washers for all exiting trucks, or wash off the tires and/or tracks of all trucks and equipment used in the unpaved areas before leaving the site. • Idling times shall be minimized either by shutting equipment 	<p>City reviews contractor specifications to ensure dust abatement requirements are included. Construction contractor implements measures in the program.</p>	<p>City reviews and approves dust abatement program. Construction contractor weekly documentation that measures are being implemented.</p>	<p>City Project Manager/Construction Supervisor</p>	<p>Prior to construction until to completion of construction</p>

Table 1. Mitigation Monitoring and Reporting Plan

<u>Mitigation Measure</u>	<u>Implementation Procedure</u>	<u>Monitoring and Reporting Actions</u>	<u>Monitoring Responsibility</u>	<u>Monitoring Schedule</u>
<p>off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.</p> <ul style="list-style-type: none"> • Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator • Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM. • Requiring all contractors use equipment that meets the California Air Resources Board's (CARB) most recent certification standard for off-road heavy-duty diesel engines. 				
<p>Measure CR-1. Procedures when Encountering Cultural Resources. The following measures will be implemented to minimize potential adverse impacts to unknown cultural resources during construction:</p> <p>If cultural resources are encountered during construction of the solar array, the contractor shall be directed to avoid any further disturbance of the materials and immediately discontinue earthwork within 100 feet of the find. At that time, the City of Hayward will contact a qualified archaeologist, certified by the Registry of Professional Archeologists (RPA), to evaluate the situation. Any identified archaeological resources shall be recorded by the archeologist on form DPR 422 (archeological sites) and/or DPR 523 (historic properties), or similar forms. Project personnel shall not collect cultural</p>	<p>In the event that cultural resources are found, construction shall stop and a qualified archaeologist shall be consulted.</p>	<p>Notify Project Manager immediately.</p>	<p>Construction contractor's Construction Superintendent</p>	<p>During construction</p>

Table 1. Mitigation Monitoring and Reporting Plan

<u>Mitigation Measure</u>	<u>Implementation Procedure</u>	<u>Monitoring and Reporting Actions</u>	<u>Monitoring Responsibility</u>	<u>Monitoring Schedule</u>
<p>resources. Procedures for stopping construction, in the event that cultural resources are exposed, shall be part of the project plans and documents. If upon discovering cultural deposits, procedures shall be in place so that the contractor can move on to another phase of work, thus allowing sufficient time to evaluate the nature and significance of the find and implement appropriate management procedures.</p>				
<p>Measure CR-2. Procedures when Encountering Human Remains. The following measure will be implemented in the event that human remains are unearthed during construction: In the event that human remains are encountered, ground disturbing activities at that location shall cease immediately, and there shall be no further excavation or disturbance of the site, or any nearby areas reasonably suspected to overlie adjacent human remains, until the County Coroner makes a determination of whether an investigation of the cause of death is required or that the remains are Native American. If the coroner determines that the remains are Native American, then the Native American Heritage Commission in Sacramento shall be contacted within 24 hours (by County coroner), along with the Most Likely Descendant(s) of the deceased Native America (by Native American Heritage Commission), and disposition of the remains shall be in accordance with all applicable laws and regulations.</p>	<p>In the event that cultural resources are found, construction shall stop and a qualified archaeologist shall be consulted.</p>	<p>Notify Project Manager immediately.</p>	<p>Construction contractor's Construction Superintendent</p>	<p>During construction</p>
<p>Measure WQ-1: Stormwater Pollution Prevention Plan. Best Management Practices (BMPs) for construction activities as appropriate in the California Storm Water Best Management Practices Handbook will be implemented by the contractor. The BMPs include measures for management and operation of construction sites to control and minimize the potential contribution of pollutants to storm runoff from these areas. These measures address procedures for controlling erosion and sedimentation and management all aspects of the construction to ensure control of potential water pollution sources. Erosion and sediment control practices include:</p>	<p>City reviews contractor specifications to ensure SWPPP/BMP requirements are included. Construction contractor implements measures in the program.</p>	<p>City reviews and approves SWPPP. Construction contractor weekly documentation that measures are being implemented.</p>	<p>Construction supervisor/City Project Manger</p>	<p>Prior to construction until to completion of construction</p>

Table 1. Mitigation Monitoring and Reporting Plan

<u>Mitigation Measure</u>	<u>Implementation Procedure</u>	<u>Monitoring and Reporting Actions</u>	<u>Monitoring Responsibility</u>	<u>Monitoring Schedule</u>
<ul style="list-style-type: none"> • installation of silt barrier • stabilize stockpiled soils • post construction stabilization or revegetation • runoff control <p>City will prepare a site-specific Stormwater Quality Protection Plan and will require the construction contractor to incorporate the measures into all aspects of the project.</p>				

7.0 References

- Far Western Anthropological Research Group, Inc. Geoarchaeological Study and Monitoring Plan for City of Hayward Recycled Water Project, Alameda County, CA. November 2017
- SMB Environmental, Inc. City of Hayward Recycled Water Project Cultural Resources Investigation Report. June 2015
- National Renewable Energy Laboratory. Life Cycle Greenhouse Gas Emissions from Solar Photovoltaics. April 21, 2014
- Calpine/Bechtel Joint Development. Application for Certification for the Russell City Energy Center, Volumes I and II. May 2001.
- California Geological Survey. Seismic Hazard Zone Report for San Leandro 7.5-Minute Quadrangle, Alameda County, California. October 2005.
- City of Hayward Community and Economic Development Department. City of Hayward General Plan. March 12, 2002
- BSK Associates Engineers & Laboratories. Geotechnical Investigation Hayward WPCF Solar Panel Array 3700 Enterprise Avenue, Hayward, California. May 28, 2010
- U.S. Department of Agriculture, Natural Resources Conservation Service. 2010. Soil Survey Geographic (SSURGO) database for Hayward, California
- Federal Emergency Management Agency (FEMA). Alameda County, California and Incorporated Areas Flood Insurance Rate Map FIRM Map 06001C0269G. August 3, 2009.
- East Bay Regional Park District. Hayward Regional Shoreline Online Publication. May 22, 2009.
- Habitat Agency Geobrowser Mapping Application. (<http://www.hepmaps.com/habitat/>)
- City of Hayward Water Pollution Control Facility. 1,000kW Photovoltaic Renewable Energy Project Environmental Initial Study/Mitigated Negative Declaration. September 2009
- Oro Loma Sanitary District/Castro Valley Sanitary District. Recirculated Environmental Initial Study-Solar Arrays in Wastewater Treatment Plant- 500kW Photovoltaic Renewable Energy Project. April 2008
- California Natural Diversity Database (CNDDDB) San Leandro General Plan. November 2001
- East Bay Municipal Utility District (EBMUD) Bayside Groundwater Project 2009



HAYWARD CITY COUNCIL

RESOLUTION NO. 18-032

Introduced by Council Member Márquez

RESOLUTION AUTHORIZING THE CITY MANAGER TO SUBMIT AN APPLICATION FOR A LOW INTEREST LOAN FROM THE CALIFORNIA ENERGY COMMISSION FOR A TWO-MEGAWATT SOLAR PHOTOVOLTAIC RENEWABLE ENERGY SYSTEM PROJECT, PROJECT NO. 07530, AT THE WATER POLLUTION CONTROL FACILITY (WPCF), IN AN AMOUNT NOT TO EXCEED \$3,000,000

WHEREAS, the City's existing one-megawatt solar photovoltaic project, located at the Water Pollution Control Facility (WPCF), was commissioned in 2011 and serves approximately twenty percent of the WPCF's energy demand; and

WHEREAS, the City Council adopted a resolution in 2016 establishing that all new municipal buildings, as well as significant retrofits of existing buildings, be zero net energy (ZNE) buildings by 2025; and

WHEREAS, the proposed project would expand the City's existing solar photovoltaic system by an additional two megawatts and substantially contribute towards the City's ZNE and greenhouse gas reduction goals; and

WHEREAS, the California Energy Commission provides loans to schools, hospitals, local governments, special districts, and public care institutions to finance renewable energy systems.

WHEREAS, City staff has identified a low interest loan program administered by the California Energy Commission to assist in construction costs; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Hayward that the City Manager is authorized to apply for a low interest loan from the California Energy Commission to construct a two-megawatt solar photovoltaic energy system to be located at the Water Pollution Control Facility, in an amount not to exceed \$3,000,000, which is the maximum loan amount for each project.

BE IT FURTHER RESOLVED, that in compliance with the California Environmental Quality Act (CEQA), the City of Hayward City Council finds that the activity funded by the loan is a project as defined by CEQA, and an Initial Study and Mitigated Negative Declaration report was prepared.

BE IT FURTHER RESOLVED, that if recommended for funding by the California Energy Commission, the City of Hayward City Council authorizes its City Manager to accept a loan up to \$3,000,000.

BE IT FURTHER RESOLVED, that the amount of the loan will be paid in full, plus interest, under the terms and conditions of the loan agreement, Promissory Note and Tax Certificate of the California Energy Commission.

BE IT FURTHER RESOLVED, that the City of Hayward City Manager is hereby authorized and empowered to execute in the name of the City of Hayward all necessary documents to implement and carry out the purpose of this resolution, and to undertake all actions necessary to undertake and complete the two-megawatt solar photovoltaic renewal energy system project at the Water Pollution Control Facility.

IN COUNCIL, HAYWARD, CALIFORNIA March 6, 2018

ADOPTED BY THE FOLLOWING VOTE:

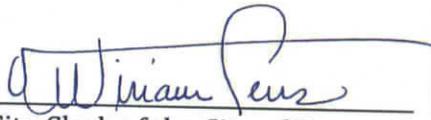
AYES: COUNCIL MEMBERS: Zermeño, Márquez, Mendall, Peixoto, Lamnin
MAYOR: Halliday

NOES: COUNCIL MEMBERS: None

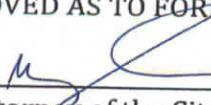
ABSTAIN: COUNCIL MEMBERS: None

ABSENT: COUNCIL MEMBERS: Salinas

ATTEST:


City Clerk of the City of Hayward

APPROVED AS TO FORM:


For MICHAEL S. LAWSON
City Attorney of the City of Hayward

STATE OF CALIFORNIA

**STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION**

RESOLUTION - RE: CITY OF HAYWARD

WHEREAS, City of Hayward (hereafter "City") has requested funding for the "City of Hayward- Photovoltaic Renewable Energy Phase II Project" (hereafter, "Project"), a project for photovoltaic system installations at the City's Water Pollution Control Facility, as more fully set forth in proposed Agreement 002-18-ECD (hereafter, "002-18-ECD"); and

WHEREAS, City is the lead agency pursuant to California Environmental Quality Act (hereafter, "CEQA") (Pub. Resources Code section 21000 et seq.) and the CEQA Guidelines (Cal. Code Regs., tit. 14, section 15000 et seq.); and

WHEREAS, City prepared an Initial Study to determine the possible environmental impacts of the Project; and on the basis of the Initial Study, prepared a Mitigated Negative Declaration (hereafter, "MND"); and

WHEREAS, City considered the Initial Study, MND and other related documents in the record before it, and on March 6, 2018 approved and adopted the MND; and

WHEREAS, the State Energy Resources Conservation and Development Commission (hereafter, "Energy Commission") is a responsible agency and must therefore, pursuant to CEQA Guidelines, sections 15091 and 15096, subdivision (h), make certain findings prior to approval of 002-18-ECD; and

WHEREAS, the Energy Commission has reviewed and considered the Initial Study and MND and other related documents in the record before it; and

WHEREAS, the Energy Commission has no information indicating that the environmental documentation is inadequate, and has used its own independent judgment to consider the Initial Study and MND and other related documents in the record before it in deciding whether to approve 002-18-ECD.

THEREFORE BE IT RESOLVED, City has previously adopted certain mitigation measures recommended in the MND and has authority to implement the mitigation measures, or to seek any required approvals for the mitigation measures, and such measures are within the responsibility of City and that the Energy Commission finds, on the basis of the entire record before it, that the mitigation measures incorporated in the MND and included as conditions in 002-18-ECD will eliminate or mitigate the environmental impacts of the proposed project to less than significant levels; and

BE IT FURTHER RESOLVED that the Energy Commission has identified additional potentially significant impacts to biological resources and has also identified feasible mitigation measures within its powers that would substantially lessen these potential effects to biological resources; these additional mitigation measures are: the execution by a qualified biologist of at least two pre-construction surveys for nesting birds if any construction activities will take place during the nesting/breeding season of native or migratory bird species potentially nesting on or near the project site, establishment of no-disturbance buffer zones around active nests during the breeding season, and weekly monitoring until a qualified biologist has determined all young have fledged; and

BE IT FURTHER RESOLVED, that these additional mitigation measures will be implemented by City, and the disbursement of loan funds is conditioned on the Energy Commission's review and approval of City's implementation of these mitigation measures, as more fully set forth in 002-18-ECD; and

BE IT FURTHER RESOLVED, that the Energy Commission approves Agreement 002-18-ECD with City of Hayward for \$2,150,955; and

BE IT FURTHER RESOLVED, that the Executive Director or his/her designee shall execute the same on behalf of the Energy Commission.

CERTIFICATION

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the California Energy Commission held on October 3, 2018.

AYE: [List of Commissioners]

NAY: [List of Commissioners]

ABSENT: [List of Commissioners]

ABSTAIN: [List of Commissioners]

Cody Goldthrite,
Secretariat