

**CALIFORNIA ENVIRONMENTAL QUALITY ACT
FINDINGS IN CONNECTION WITH
THE APPROVAL OF THE
COGENERATION PLANT REPLACEMENT PROJECT PHASE I PROJECT
UNIVERSITY OF CALIFORNIA, SANTA CRUZ CAMPUS**

I. ADOPTION OF THE MITIGATED NEGATIVE DECLARATION

Pursuant to Title 14, California Code of Regulations, Section 15074(b), the Chancellor of the University of California, Santa Cruz campus ("UC Santa Cruz") pursuant to authority delegated from the Board of Regents of the University of California (The Regents) (hereinafter referred to collectively as the University), hereby finds that the Mitigated Negative Declaration and the Initial Study prepared for the proposed Cogeneration Plant Replacement Project Phase I Project ("Project") have been completed in compliance with the California Environmental Quality Act, Public Resources Code Sections 21000 et seq. (CEQA). The University further finds that it reviewed and considered the information contained in the Mitigated Negative Declaration and Initial Study, and in the campus' 2005 Long Range Development Plan Environmental Impact Report (2005 LRDP EIR), and any comments on these documents prior to approving the design of the project. The University hereby finds that the Mitigated Negative Declaration reflects the independent judgment and analysis of the University and adopts the Mitigated Negative Declaration.

II. FINDINGS

The University certifies that its Findings are based on a full appraisal of all information in the records, including all comments received up to the date of adoption of these Findings concerning the environmental impacts identified and analyzed in the Initial Study and Mitigated Negative Declaration that are supported by substantial evidence in the record. The University hereby adopts the following Findings pursuant to Title 14, California Code of Regulations, Section 15074, in conjunction with the approval of the project, as set forth in Section III, below.

A. Background

The UC Santa Cruz cogeneration plant provides uninterrupted backup power for campus emergency responders, laboratory life/safety systems, and sensitive instruction and research equipment. The cogeneration system also supplements the electricity supplied to the campus by PG&E, which reduces the Campus' utility expenses. The byproduct heat of the cogeneration operation is used to preheat water for three boilers that provide hot water for space heating of buildings in the central campus, thus reducing the amount of purchased energy required for heating. The existing cogeneration system consists of a single, natural gas-fired reciprocating engine capable of producing 2.6 MW of electricity.

UC Santa Cruz proposes to replace the Campus' existing cogeneration equipment with a new, 4.2 megawatt (MW) natural gas-fueled combustion turbine generator (CTG). The added capacity would enable the Campus to meet a greater proportion of the backup power needs of the existing buildings in the central campus and of the Biomedical Sciences Facility, which is currently under

construction. The equipment would be installed in a new, 5,600-sf building adjacent to the existing cogeneration plant. The project also includes upgrades to the Campus electrical system to accommodate the additional electricity production capacity of the new system and to allow for efficient switching on of backup power to new and/or different facilities. The project would require improvements to the natural gas supply to the campus to improve the reliability of pressure in the gas line that serves the cogeneration plant. The improvements may be limited to modifications to PG&E's operation of its existing distribution network but could include construction of a new natural gas distribution line to bring gas from the high pressure transmission pipeline along the railroad tracks south of Mission Street to the campus. Once the new cogeneration equipment is in operation, the existing cogeneration equipment would be decommissioned.

B Environmental Review Process

A Tiered Initial Study (State Clearinghouse No. 2011082037) was prepared for the Project in accordance with CEQA and the University of California Procedures for Implementation of CEQA. The Initial Study, in accordance with Section 15168 of the CEQA Guidelines, is tiered from the campus 2005 LRDP EIR (State Clearinghouse No. 2005012113), which was certified by The Regents in connection with the approval of the 2005 LRDP in September 2006.

The proposed Project is part of the physical development proposed in the 2005 LRDP; therefore, the environmental analysis for the project is presented and analyzed within the context of the 2005 LRDP and incorporates by reference applicable portions of the 2005 LRDP EIR. The 2005 LRDP EIR, which is a program EIR pursuant to Section 15168 of the CEQA Guidelines, analyzes the overall effects of campus growth and facility development through 2020-21, and identifies measures to mitigate the significant adverse impacts and cumulative impacts associated with that growth.

As a tiered document, the Initial Study for the project relies on the 2005 LRDP EIR for: (1) a discussion of general background and setting information for environmental topic areas; (2) overall growth-related issues; (3) issues that were evaluated in sufficient detail in the 2005 LRDP EIR for which there are no significant new information (including new mitigation measures), changes in the project, or changes in circumstances that would require further analysis; and (4) cumulative impacts. The purpose of the Tiered Initial Study is to evaluate the potential environmental impacts of the project with respect to the existing 2005 LRDP EIR analysis in order to determine what level of additional environmental review, if any, would be appropriate.

The Tiered Initial Study analyzes the potential impacts of the Project and the adequacy of the existing environmental analysis in the 2005 LRDP EIR with regard to the following environmental topic areas: (1) aesthetics, (2) agricultural resources, (3) air quality, (4) biological resources, (5) cultural resources, (6) geology, soils, and seismicity, (7) hazards and hazardous materials, (8) hydrology and water quality, (9) land use and planning, (10) mineral resources, (11) noise, (12) population and housing, (13) public services, (14) recreation, (15) transportation, circulation and parking, and (16) utilities and service systems. The Tiered Initial Study also includes a section on climate change, which analyzes the potential impacts of greenhouse gas emissions associated with the Project on global climate change. This issue area was not analyzed

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in the 2005 LRDP EIR, but has subsequently been added to the CEQA checklist to reflect changes in State law.

Based on the analysis contained in the Tiered Initial Study, it was determined that the Project would have one potentially significant effect on the environment that has not previously been addressed in the 2005 LRDP EIR, and new project-specific mitigation measures, in addition to those previously identified in the 2005 LRDP EIR, are required to reduce these effects to a less-than-significant level. The storm water outfall improvements associated with the proposed cogeneration plant are in close proximity to historic features associated with the Bridge Kiln, a lime kiln that is part of previously recorded historic site CA-SCR-183H, in the bed of Jordan Gulch. If Jordan Gulch were used as an access route to the storm water improvements (such as for trucks hauling rock), the project could damage features associated with the kiln, which is a significant historical resource. This is a potentially significant impact that would be reduced to a less-than-significant level with implementation of project-specific Cogen Mitigations CULT-1A and CULT-1B. The Project would not result in any potentially significant impacts that would not be mitigated to less-than-significant levels by previously adopted 2005 LRDP mitigation measures currently being implemented, or are not sufficiently addressed by the 2005 LRDP EIR.

New project-specific mitigation measures, in addition to those previously identified in the 2005 LRDP EIR, are identified to further reduce less-than-significant impacts in the areas of aesthetics, cultural resources, and noise. Cogen Mitigation AES-1 requires the Campus to plant a tree, if feasible, to offset the less-than-significant aesthetic impact of removing redwood trees to accommodate construction of the new building. Although the potential for California red-legged frog (CLRF) to occur on the project site is very low and the potential impact to CLRF would be less than significant, implementation of Cogen Mitigation BIO-1, which requires a pre-construction survey and other avoidance measures, would ensure that Project construction does not result in harm to individual frogs. Project-specific Cogen Mitigations CULT-2A and -2B are identified to further reduce the less-than-significant impact of the construction of the off-site natural gas distribution line on undiscovered archaeological resources.

The University prepared a Mitigated Negative Declaration for the Cogeneration Plant Replacement Phase 1 Project that reflects the conclusions of the Tiered Initial Study. The project's Proposed Mitigated Negative Declaration and Draft Tiered Initial Study were submitted to the State Clearinghouse in the Governor's Office of Planning and Research and circulated for a 30-day public review period beginning on August 15, 2011 and concluding on September 14, 2011. During that time, the document was available for review by various state and local agencies, as well as by interested individuals and organizations. Two letters were received during the comment period. One of the comments was from the Monterey Bay Unified Air Pollution Control District (MBUAPCD), and did not raise any environmental issues that required a response by the University. The other letter was from an individual who expressed concern about the impacts of project operational noise on users of a patio adjacent to an office an academic building near the project site. Copies of these letters and responses to comments can be found in Appendix E of the Final Initial Study. As further explained in the responses to comments, neither of the comment letters raised issues requiring recirculation pursuant to CEQA Guideline 15073.5, including identification of a new, avoidable significant effect requiring the addition of a

new mitigation measure, or a determination that the proposed mitigation measures or project revisions will not reduce potential effects to a less-than-significant level.

C. Relation of the Project to the LRDP EIR

The 2005 LRDP EIR is a Program EIR, prepared pursuant to Section 15168 of the CEQA Guidelines (Title 14, California Code of Regulations, Sections 15000 et seq.) and Section 21080.09 of the Public Resources Code. The 2005 LRDP EIR analyzed full implementation of uses and physical development proposed under the 2005 LRDP through the year 2020-21 to accommodate a projected total enrollment level of 19,500 students, and identified measures to mitigate the significant adverse project and cumulative impacts associated with that growth. The Project would not result in any increase to the campus population, and accordingly, would not exceed the population increase projected in the 2005 LRDP EIR. Additionally, the Project is consistent with and is part of the campus development that was anticipated in the 2005 LRDP and evaluated in the 2005 LRDP EIR.

D. Environmental Summary

The Cogeneration Plant Replacement Phase 1 Project would not result in significant project level impacts or make cumulatively considerable contributions to significant cumulative impacts, including those identified in the 2005 LRDP EIR.

1. Potentially Significant Impacts that are Reduced to a Less-than-Significant Level with Proposed Mitigation

The Initial Study identifies the following potentially significant impact associated with the Project that would be reduced to a less-than-significant level by the implementation of mitigation measures identified in the Initial Study. The associated mitigation measures are identified and briefly discussed below. The Initial Study provides the full text and detailed description of these mitigation measures (see Attachment 1 to these Findings, and Initial Study Appendix B).

a. Potential impact on historic features.

The Initial Study (pp. 36-37) determined that improvements to two storm water outfalls in Jordan Gulch could result in a potentially significant impact on historic features associated with the Bridge Kiln, a lime kiln that is part of previously recorded historic site CA-SCR-183H. Cogen Mitigations CULT-1A and CULT-1B, which include measures to avoid and/or protect these resources, would reduce this potential impact to a less-than-significant level.

2. Less-than-Significant Impacts that would be Further Reduced with Proposed Mitigation

The Initial Study identifies the following less-than-significant impacts associated with the Project for which the Initial Study identifies mitigations for further impact reduction.

b. Impacts of tree removal on visual character and quality.

The Initial Study (p. 22) determined that the removal of trees that partly screen the Fackler Cogeneration Plant building from McLaughlin Drive would not result in a significant impact on

the visual character and quality of the project area. However, to further reduce the less-than-significant impact of the tree removal, the Campus would implement COGEN Mitigation AES-1, which requires that the Campus include a tree in the planting plan for the landscaped area west of the boiler building, if feasible.

c. Impacts to California red-legged frogs.

The potential for California red-legged frog, a federally listed threatened species, to occur on the project site is considered very low. However, it is possible that individual frogs could travel through the area between breeding and non-breeding habitat. The Initial Study (p. 31) determined that the proposed Project would not result in a significant impact to this species. Nevertheless, to ensure that any construction activities in the Jordan Gulch drainage do not result in harm to individual frogs, the Campus would implement COGEN Mitigation BIO-1, which requires a pre-construction survey for frogs and other avoidance measures as warranted.

d. Potential damage to undiscovered archaeological resources.

The Initial Study (pp. 38-39) determined that the installation of a new natural gas distribution line in the existing Western Drive utility corridor has a slight potential to disturb previously undiscovered archaeological deposits or human remains, should any be present within the utility corridor, which would be a less than significant impact. Implementation of Cogen Mitigations CULT-2A and -2B would further reduce the potential for an impact to occur, and would provide for recordation and appropriate treatment in the unlikely event that a significant resource is present within the area of disturbance.

3. Less-than-Significant Impact or No Impact

For the issues described below, the Project would result in no impact or less-than-significant impacts, and no mitigation measures would be needed.

a. Aesthetics

Based on the analysis presented in the Initial Study (pp. 19-22), the proposed Project would not have an impact on scenic vistas or scenic resources. The Project would not have a significant impact related to degradation of the visual character and quality of the site and its surroundings, or with related to light and glare, because the Project incorporates 2005 LRDP EIR mitigations AES-5A, AES-5F, AES-6B, AES-6C and AES-6E, which require review of project design by the UCSC Design Advisory Board, evaluation for their aesthetic value of trees that would be removed, and which set lighting parameters. No mitigation is necessary.

b. Agricultural and Forestry Resources

Based on the analysis presented in the Initial Study (pp. 23-24), the proposed Project would have no impact related to agricultural resources. The removal of trees to accommodate construction for the proposed Project would not constitute a significant impact to timber resources. No mitigation is required; however, as set forth in Section C.2, above, the less-than-significant aesthetic impacts of the tree removal would be further reduced by implementation of Cogen Mitigation AES-1. No additional mitigation is necessary.

c. Air Quality

Based on the analysis presented in the Initial Study (pp. 25-29), the Project would have no impact related to conflict with the applicable Air Quality Management Plan or objectionable odors. Emissions of criteria air pollutants and toxic air contaminants associated with project construction and operations would result in less-than-significant impacts with respect to air quality standards and exposure of sensitive receptors to pollutants, because the Project incorporates 2005 LRDP EIR Mitigations AIR-1, AIR-2C, and AIR-6, which require measures to control construction-related emissions of fugitive dust and toxic air contaminants and installation of VOC and NO_x controls on the new gas turbines, and because the Campus implements 2005 LRDP EIR Mitigation AIR-5A on an ongoing basis.

d. Biological Resources

Based on the analysis presented in the Initial Study (pp. 30-32), the Project would have no impact on sensitive natural communities or federally protected wetlands, or with respect to conflicts with local policies or ordinances protecting biological resources or with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved habitat conservation plan. The Project would have less than significant impacts on California red-legged frog, nesting special-status birds, and San Francisco dusky-footed woodrat (a State-listed species of concern), because the Project incorporates 2005 LRDP Mitigations BIO-6, BIO-11 and BIO-14, which require pre-construction surveys and other avoidance measures for species that could be affected by the Project. No mitigation is required; however, as set forth in Section C.2, above, implementation of Cogen Mitigation BIO-1 would further reduce the potential for impact to California red-legged frog.

e. Cultural Resources

Based on the analysis presented in the Initial Study (pp. 33-40), the Project impacts related to archaeological resources, paleontological resources and unique geological features, and disturbance of human remains would be less than significant because the Project incorporates 2005 LRDP Mitigations CULT-1A through -1C, CULT-1G, CULT 2B, CULT-4C, CULT-5A, CULT-5C and CULT-5D. No mitigation is required; however, as set forth in Section C.2, above, implementation of Cogen Mitigations CULT-2A and -2B would further reduce the potential for an impact to previously undiscovered archaeological deposits or human remains in the proposed natural gas distribution corridor to occur.

f. Geology and Soils

Based on the analysis presented in the Initial Study (pp. 41-43), the Project would result in no impact related to rupture of a known earthquake fault or the use of septic tanks or alternative wastewater disposal systems. Impacts of the Project related to seismic shaking, soil erosion or loss of topsoil, and construction on an unstable geologic unit or on expansive soil would be less than significant because the Project incorporates 2005 LRDP Mitigation GEO-1, which requires that the Campus perform and implement the recommendations of detailed geotechnical studies for projects located on sites where existing geotechnical data is insufficient. No mitigation is required.

g. Greenhouse Gas Emissions

Based on the analysis presented in the Initial Study (pp. 44-46), the Project would not result in greenhouse gas emissions that may have a significant effect on the environment and would not result in a significant impact related to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. No mitigation is required.

h. Hazards and Hazardous Materials

Based on the analysis presented in the Initial Study (pp. 47-49), the Project would have no impacts related to hazardous emissions or handling of hazardous or acutely hazardous materials within one-quarter mile of a school; location on a list of hazardous materials sites; or safety hazards associated with a public airport or private airstrip. The Project impacts related to hazardous materials use, storage and disposal; impairment of an adopted emergency response plan or emergency evacuation plan; and wildland fires; would be less-than-significant because the Project incorporates 2005 LRDP Mitigations HAZ-7, HAZ-9A, and HAZ-10A, which require that the Campus survey buildings for potential contamination before any demolition work and continue to implement existing Campus policies regarding notification of road closures and emergency access during construction, and that the UC Santa Cruz Fire Department continue to conduct regular inspections of Campus buildings. No mitigation is required.

i. Hydrology and Water Quality

Based on the analysis presented in the Initial Study (pp. 50-53), the Project would not result in impacts related to water quality, flooding, or inundation by seiche, tsunami or mudflow. The Project impacts on groundwater recharge and impact related to alteration of existing drainage patterns and increases in runoff would be less than significant because the Project incorporates 2005 LRDP Mitigations HYD-2A, HYD-2B, HYD-3C, and HYD-3D. No mitigation is required.

j. Land Use

Based on the analysis presented in the Initial Study (p. 54), the Project would not result in any impacts related to land use.

k. Mineral Resources

Based on the analysis presented in the Initial Study (p. 55), the Project would not result in any impacts related to loss of availability of mineral resources.

l. Noise

Based on the analysis presented in the Initial Study (pp. 56-60), the Project would not result in impacts related to groundborne vibration or groundborne noise. Project impacts related to temporary or permanent increases in noise levels would be less than significant because the Project incorporates 2005 LRDP Mitigation NOIS-1. No mitigation is required.

m. Population and Housing

Based on the analysis presented in the Initial Study, the Project would not result in impacts related to population growth, displacement of existing housing or people, or creation of a demand for housing. No mitigation is required.

n. Public Services

Based on the analysis presented in the Initial Study (p. 63), the Project would not result in significant impacts associated with the provision of new or physically altered governmental facilities. No mitigation is required.

o. Recreation

Based on the analysis presented in the Initial Study (p. 64), the Project would not result in impacts related to increased use of existing recreational facilities or the construction or expansion of recreational facilities. No mitigation is required.

p. Traffic, Circulation and Parking

Based on the analysis presented in the Initial Study (pp. 65-66), the Project would not result in impacts related to an increase in traffic, a change in air traffic patterns, hazards associated with design features, parking capacity or alternative transportation. The Project would result in a construction-phase impact on emergency access that would be less than significant because the Project incorporates 2005 LRDP Mitigation HAZ-9A, which requires that the Campus continue to implement existing policies regarding notification of road closures and emergency access during construction. No mitigation is required.

q. Utilities and Service Systems

Based on the analysis presented in the Initial Study (pp. 67-69), the Project would not result in impacts related to new water or wastewater treatment facilities or expansion of existing facilities, water supplies, compliance with statutes and regulations related to solid waste, or construction or expansion of telecommunications facilities. Impacts of the Project related to construction of new storm water facilities, disposal of solid waste, and construction or expansion of electrical, natural gas, chilled water, or steam facilities, would be less than significant with implementation of Cogen Mitigations CULT-2A and CULT-2B, which are described under *Cultural Resources*, above.

D. Incorporation by Reference

These Findings incorporate by reference in their entirety the text of the Initial Study and Mitigated Negative Declaration prepared for the Project; and the 2005 LRDP EIR, Mitigation Monitoring Program and re-affirm the Findings adopted by The Regents in connection with its approval of the 2005 LRDP and LRDP EIR. Without limitation, this incorporation is intended to elaborate on the scope and nature of project and cumulative impacts, related mitigation measures, and the basis for determining the significance of such impacts.

E. Mitigation Monitoring Program

CEQA requires the Lead Agency approving a project to adopt a monitoring program for changes to the project that it adopts, incorporates into the project, or makes a condition of approval, or in order to ensure compliance during project implementation. The Mitigation Monitoring Program for the project-specific mitigation measures identified above, prepared to serve this purpose, is included in the Initial Study as Appendix B and is hereby adopted by the University.

F. Record of Proceedings

Various documents and other material constitute the record of proceedings upon which the University bases the Findings and decisions contained herein. These documents are located in the offices of Physical Planning and Construction; Barn G, University of California, 1156 High Street, Santa Cruz, CA 95064. The custodian for these documents is the Office of Physical Planning and Construction.

G. Summary

Based on the foregoing Findings and the information contained in the record, the University finds with respect to the project:

1. Changes or alterations have been required in, or incorporated into, the Approval for the project. These changes or alterations mitigate to a less-than-significant level or avoid the potentially significant environmental effects of the project as identified in the Initial Study.
2. There is no substantial evidence in the record as a whole that the project as proposed and mitigated may have a significant effect on the environment.
3. The Mitigated Negative Declaration reflects the University's independent judgment and analysis.

III. APPROVALS

Based on the foregoing, the University intends to take the following actions:

- A. Adopt a Mitigated Negative Declaration based on the Initial Study for the project as described in Section I, above.
- B. Adopt and incorporates into the Cogeneration Plant Replacement Phase 1 Project all the mitigation measures identified in the project's Initial Study.
- C. Adopt the Mitigation Monitoring Program for the project included in the Initial Study as Appendix B.
- D. Adopt these Findings in their entirety as set forth in Section II, above.
- E. Approve the design and construction of the Cogeneration Plant Replacement Phase 1 Project.