

CALIFORNIA COASTAL COMMISSION

SAN DIEGO AREA
7575 METROPOLITAN DRIVE, SUITE 103
SAN DIEGO, CA 92108-4402
(619) 767-2370



W7a

Addendum

December 9, 2010

To: Commissioners and Interested Persons

From: California Coastal Commission
San Diego Staff

Subject: Addendum to **Item W7a**, Coastal Commission Permit Application
#6-10-078 (UCSD), for the Commission Meeting of December 15-17, 2010

Staff recommends the following minor corrections be made to the above-referenced staff report: [Proposed new language is shown in underline text; language to be deleted is shown in ~~strikeout~~ text.]

1. On page 1 of the staff report, the "Description" shall be corrected as follows and all further references shall be similarly corrected:

Description: Installation of a temporary (5 year duration) alternative energy exhibit at the ~~Steven~~ Stephen Birch Aquarium...

2. On page 3 of the staff report, the first sentence in the fourth paragraph shall be corrected as follows:

The 3 exhibits which are proposed to highlight solar power, ocean power, and people power will have a maximum height of ~~8~~ 9 feet above the courtyard level.

CALIFORNIA COASTAL COMMISSION

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W7a

Filed: November 17, 2010
49th Day: January 5, 2011
180th Day: May 16, 2011
Staff: E Stevens-SD
Staff Report: November 19, 2010
Hearing Date: December 15-17, 2010

STAFF REPORT: CONSENT CALENDAR

Application No.: 6-10-078

Applicant: University of California, San Diego **Agent:** Miltion Phegley

Description: Installation of a temporary (5 year duration) alternative energy exhibit at the Steven Birch Aquarium. The exhibit will include 4 distinct educational exhibits featuring static, moving and interactive displays related to themes of solar power, wind power, ocean power, and people power. The maximum height above the courtyard level of any of the exhibits will be 18 feet.

Lot Area	586,035 sq. ft.
Building Coverage	31,121 sq. ft. (5%)
Pavement Coverage	212,914 sq. ft. (36%)
Landscape Coverage	342,000 sq. ft. (59%)
Parking Spaces	259
Zoning	Unzoned
Plan Designation	Academic
Ht abv fin grade	42 feet

Site: Smargon Courtyard, Steven Birch Aquarium, 2300 Expedition Way, UCSD Campus, La Jolla, San Diego, San Diego County. APN 344-90-07.

Substantive File Documents: Draft UCSD 2004 Long Range Development Plan, CDP #6-89-188, CDP #5-08-251

I. STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

MOTION: *I move that the Commission approve the coastal development permit applications included on the consent calendar in accordance with the staff recommendations.*

STAFF RECOMMENDATION TO ADOPT CONSENT CALENDAR:

Staff recommends a **YES** vote. Passage of this motion will result in approval of all the permits included on the consent calendar. The motion passes only by affirmative vote of a majority of the Commissioners present.

II. Standard Conditions.

See attached page.

III. Special Conditions.

The permit is subject to the following conditions:

1. Term of Permit/Monitoring Program. The subject permit authorizes use of the approved energy exhibit for five years only, beginning the first day of operation of the energy exhibit, unless and until this permit is amended by the Coastal Commission.

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and written approval, a program to monitor the energy exhibit. The program shall include:

- a) exact mortality counts of avian and bat species associated with use of the approved wind turbines, taken daily whenever the wind turbines are in operation.

This information shall be summarized and submitted to the Coastal Commission annually. The permittee shall undertake the monitoring in accordance with the approved program. Any proposed changes to the approved program shall be reported to the Executive Director. No changes to the program shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

IV. Findings and Declarations.

The Commission finds and declares as follows:

A. Detailed Project Description/History. Proposed is the installation of a temporary (5 year duration) alternative energy exhibit within the 7,000 sq. ft. outdoor Smargon Courtyard at the existing Steven Birch Aquarium on the University of California, San Diego's Scripps Institution of Oceanography (SIO) Campus (see exhibit 1). The exhibit will include 4 distinct educational exhibits featuring static, moving and interactive displays related to themes of solar power, wind power, ocean power, and people power. The maximum height above the courtyard level of any of the exhibits will be 18 ft.

The wind power exhibit will feature 3 different turbine models. The 3 turbine models are the Gale 1 Vertical Axis Wind Turbine, the EDDY 600W Vertical Axis Wind Turbine, and the HEA Energy Ball V100 Horizontal Axis Wind Turbine (see exhibit 2). A combination of horizontal and vertical axis turbines is proposed in order to highlight the variety of turbine technology available. It is believed that vertical axis wind turbines pose less of a risk for birds and bats. Therefore, 2 vertical axis turbines were chosen and only 1 horizontal axis turbine was chosen for the display. The minimum distance from the courtyard level to the bottom of turbine assembly will be 10 feet. The turbines will be staggered in height in order to better capitalize on wind resources. The aquarium will have the option of connecting the wind turbines to the power grid or to only use the electricity generated to run an educational LCD display, depending on the amount of electricity generated.

The applicant submitted a similar application in 2009, which was subsequently withdrawn. The previous application proposed to install a 39 ft. high residential wind turbine in the same courtyard. Due to the fact that the Steven Birch Aquarium is located at the top of a large canyon, Commission staff was concerned that the turbine might have created a risk of bird strikes to raptors using the canyon updraft for hunting. Commission staff requested that the applicant first undertake a 1 year site specific study of the area prior to installation. The study was never completed, and instead the applicant re-submitted an improved project with substantially lower wind turbine heights.

The Commission biologist has reviewed the proposed project and has determined that it poses minimal threat to birds and that no pre-installation study is needed in this particular case. This determination is based on the facts that the new design is only a maximum of 18 ft. high and is dwarfed by a very large eucalyptus tree directly to its northwest. Additionally, the adjacent decorative pergola directly south, and the aquarium building directly north, are 19 ft. and 18 ft. respectively above the courtyard level (see exhibit 3).

The 3 exhibits which are proposed to highlight solar power, ocean power, and people power will have a maximum height of 8 feet above the courtyard level. The proposed energy exhibit will be visually compatible in scale and design with nearby buildings and it will not be visible from La Jolla Shores Drive to the west nor from any other public roadways. The proposed development will not result in any adverse visual impacts, consistent with Coastal Act policies.

The Stephen Birch Aquarium is located on the SIO campus, the latter of which is one of the oldest, largest, and most important centers for global science research and graduate training in the world. SIO is also known for the Stephen Birch Aquarium which serves as a public education and exploration center for SIO. The Aquarium has numerous exhibits of sea life with a variety of education and research programs. The Stephen Birch Aquarium was originally permitted on 9/12/88 pursuant to CDP #6-89-188 which was for the construction of a new aquarium in a new location on the SIO campus. The older aquarium was previously located on the main SIO campus, west of La Jolla Shores Drive which, over time, had proven to be too small of a site to accommodate the expanding needs of the facility. As such, the much larger and improved aquarium facility was constructed on the east side of La Jolla Shores Drive where it presently exists today. The

aquarium facility overlooks the main SIO campus and provides panoramic ocean views of La Jolla Shores (public beach).

UCSD has informally submitted to staff a draft Long Range Development Plan (LRDP), EIR and topographic maps as an aid in analyzing development proposals, but the Coastal Commission has not yet formally reviewed the LRDP, and the University has not indicated any intention of submitting the LRDP for formal Commission review in the future. The appropriate standard of review for this project is thus Chapter 3 policies of the Coastal Act.

B. Biological Resources. Coastal Act policies 30240 and 30251 restrict the alteration of natural landforms and protect sensitive habitats. Section 30231 of the Coastal Act requires that coastal waters are protected and runoff minimized.

The proposed development is not expected to have an adverse impact on any sensitive species or habitat. Given that there is a minimal risk that the proposed wind turbines may have an adverse impact on bat and avian species, however, the Commission has included Special Condition #1, which requires the applicant to monitor the proposed development and to document any avian or bat mortality caused by the wind turbines. The proposed development will not result in erosion or adverse impacts to water quality. Thus, the Commission finds the project, as conditioned, consistent with the resource protection policies of Chapter 3 of the Coastal Act.

C. Community Character /Visual Quality. The development is located within an existing developed area and will be compatible with the character and scale of the surrounding area and will not impact public views. Therefore, the Commission finds that the development, as conditioned, conforms to Section 30251 of the Coastal Act.

D. Public Access/Parking. The proposed development will not have an adverse impact on public access to the coast or to nearby recreational facilities. The proposed development conforms to Sections 30210 through 30214, Sections 30220 through 30224, Section 30252 and Section 30604(c) of the Coastal Act.

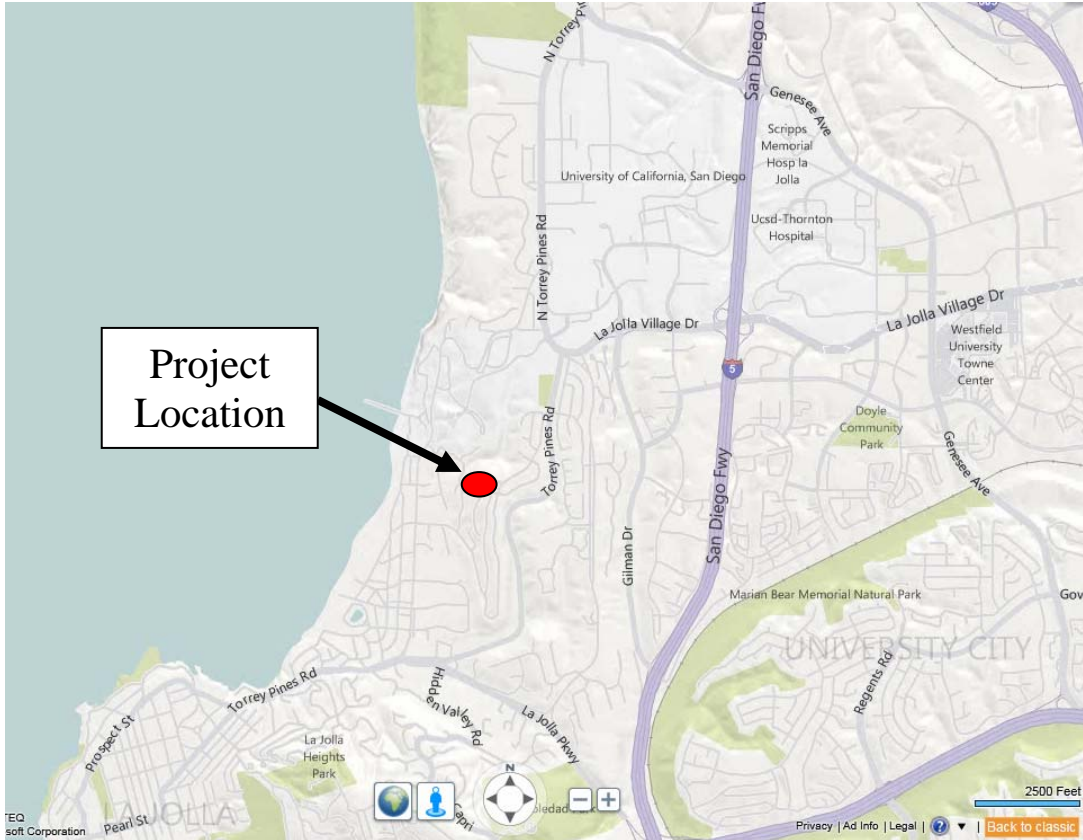
E. Local Coastal Planning. The City of San Diego does have a certified LCP for most of its coastal zone. However, the UCSD campus segments in La Jolla are not part of that program and remain an area of deferred certification where the Commission retains coastal development permit authority. UCSD does have a draft Long Range Development Plan (LRDP), but does not plan to submit it for certification. The proposed development is consistent with Chapter 3 of the Coastal Act, the legal standard of review, and also with the draft LRDP which is used as guidance. Approval of the project will not prejudice the ability of the university to prepare and implement an LRDP that is in conformity with the provisions of Chapter 3.

F. California Environmental Quality Act. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and is consistent with the requirements of the Coastal Act to conform to CEQA.

STANDARD CONDITIONS:

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

Project Location



Project Location

EXHIBIT NO. 1
APPLICATION NO.
6-10-078
Project Location
California Coastal Commission

Wind Turbine Models



EDDY 600W VERTICAL AXIS WIND TURBINE



HEA ENERGY BALL V100
HORIZONTAL AXIS WIND TURBINE



GALE 1 VERTICAL AXIS WIND TURBINE

EXHIBIT NO. 2

APPLICATION NO.

6-10-078

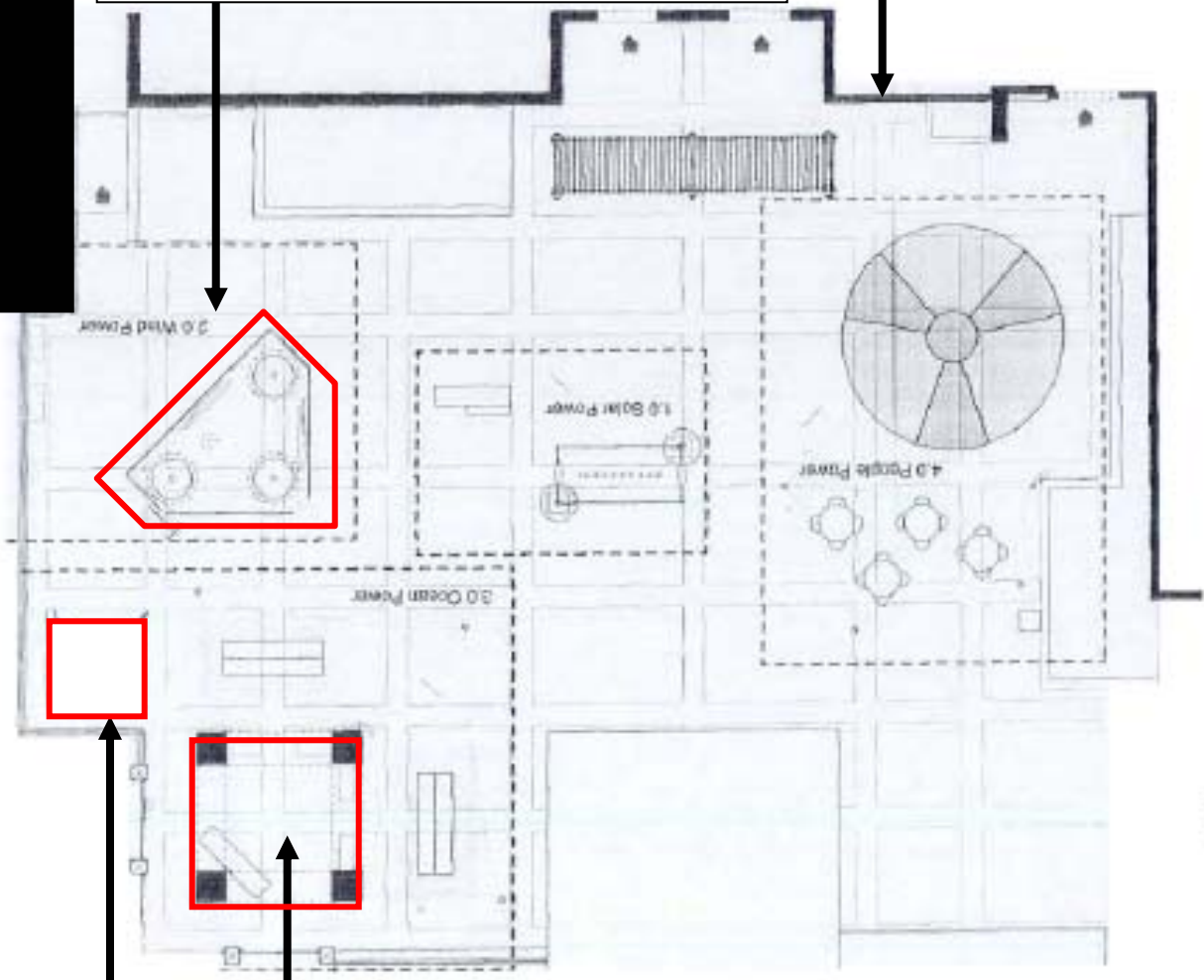
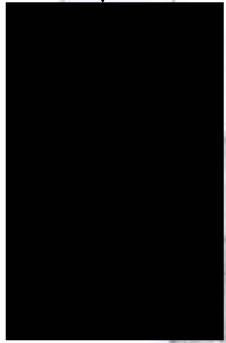
Turbine Models

Site Plan

Location of existing 18' aquarium building

Location of existing eucalyptus tree

Current Turbine Proposal Location



Location of existing 19' Pergola

Location of previous turbine proposal



EXHIBIT NO. 3
APPLICATION NO. 6-10-078
Site Plan
 California Coastal Commission