COLLEGE OF THE DESERT

News Release

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For Immediate Release
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Self-sustainable college campus for Palm Springs one step closer

The vision to build a self-sustainable campus in Palm Springs is one step closer to reality with the recent signing of contracts between College of the Desert (COD) and Southern California Edison (SCE).

On Friday, February 11, the COD Board and SCE signed official agreements that will see the energy company develop, construct and operate a 60-acre 'GreenPark' solar farm on the 119-acre community college campus planned for the northwest corner of Tramview Road and Indian Canyon Drive that will serve the western valley cities of Palm Springs, Cathedral City and Desert Hot Springs.

"This partnership with Southern California Edison is a crucial component of our plan to design, build and operate a self-sustainable college campus in the west valley region," said Jerry Patton, president of College of the Desert.

SCE's solar park is expected to generate an estimated 10 MWp (dc), mega watts on peak, of energy from solar energy – enough to power approximately 5,200 homes at a point in time.

"The large solar power array Southern California Edison plans to construct at College of the Desert will provide additional clean energy to our Coachella Valley customers plus enhance industry knowledge about integrating this type of renewable energy plant into neighborhood power grids," said Mark Nelson, SCE's director of generation planning and strategy.

Photovoltaic solar and other green technologies are planned for the site because of the available land area, height restrictions, proximity to a residential neighborhood, and a mission to promote sustainable use of water resources. SCE will also use the site for controlled research and development, and alternative energy training programs to help the state move toward a cleaner energy future.

Dr. Edwin Deas, COD's vice-president of business affairs, said that SCE plans to provide the West Valley Campus with access to its energy efficient technologies that are not yet widely available in California.

Emerging energy efficient technologies such as advanced lighting and daylighting, façade systems that minimize heat gain or loss, and advanced air conditioning systems are being considered for the campus buildings.

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"Our West Valley Campus design, construction and operation will integrate and emphasize conservation, efficiency, recovery of wastes, adaptation and regeneration of ecological systems and functions," said Deas. "The campus will become a model for research and teaching on sustainability and stewardship, and will be a net zero energy project."

He said that the partnership with SCE will promote energy efficiency and reduce utility costs for the college. The lease will also provide a revenue stream for the college to develop programs and services at the West Valley Campus.

"West Valley Campus will allow us to show that our integrated sustainability approach is environmentally and socially responsible, can solve environmental challenges, and be economically viable through cost savings and reduced operating costs. SCE is a vital part of our self-sustainable campus plan," Deas said.

In the fall, the City of Palm Springs obtained the 119 acres from the Bureau of Land Management and transferred the land to Desert Community College District for the new West Valley Campus of College of the Desert.

"As Palm Springs continues on its path to becoming a more sustainable community, the City is tremendously excited that the West Valley Campus' much anticipated *GreenPark* and solar farm is now one step closer to reality," said Palm Springs Mayor Steve Pougnet.

"This park is a crucial component to creating a self-sustainable West Valley Campus in Palm Springs that will be one of the most green and clean in the country, setting the gold standard when it comes to creating the next generation of green jobs in our region. I want to thank COD and Southern California Edison for coming together to forge this much needed partnership, which will benefit thousands of potential students in Palm Springs and the entire Coachella Valley," Pougnet said.

In December the COD Board appointed an architectural integrated design team that has started work on designing the self-sustainable campus.

- 30 -

For information on SCE's solar PV project, please see www.edison.com/solar

Questions & Answers

1. Why is COD developing the West Valley Campus?

COD's Palm Desert Campus is reaching capacity for enrollment; at the same time, access from the outer regions of the Valley is becoming more difficult. In 2004, citizens passed Measure B, a $346.5 million bond issue that included a mandate to establish satellite campuses in the east and west Valley. The East Valley Campus at Mecca-Thermal is operational; and the leased facilities in Indio will be replaced by a new, permanent 3-story building in downtown Indio. In 2007, COD's Board of Trustees identified Palm Springs as the location of the West Valley Campus with a small satellite center in Desert Hot Springs. COD is already offering classes at Palm Springs High School and the new Desert Energy Enterprise Center.

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The City of Palm Springs is diversifying its economy and developing plans to establish a green economy and attract clean technology companies. COD is poised to educate future 'green collar' workers and become a catalyst and economic development driver for the region's economic plans.

2. Why a self-sustainable campus?

The College has three reasons for developing a self-sustainable campus.

1. To reduce its ecological footprint (eg, water and energy consumption and conservation, and greenhouse gas emissions) to demonstrate and teach that sustainable buildings and infrastructure are environmentally and socially responsible, and economically viable.
2. To show the ecological, social, and economic value of designing campus buildings and infrastructure using an integrated approach.
3. To reclaim resources and generate energy through renewable technologies in a sustainable fashion.

College of the Desert recognizes the opportunity to work with the City of Palm Springs to achieve these sustainability goals. COD intends to not only teach the principles of sustainability but to distinguish itself from other post-secondary institutions by inviting the West Valley Campus and Valley community to learn, teach, work, and experience the benefits and challenges of a sustainable campus. For example, if water is processed on campus in a closed-loop system, the campus community will need to learn to prevent hazardous materials (eg, from labs) from entering the water system.

In addition, COD intends to show that if community needs are considered in concert with the needs of the campus, green buildings and infrastructure can pay for themselves. The College recognizes the benefit of demonstrating how green buildings result in lower life cycle costs and higher productivity, and how passive or active cooling based on renewable sources is better for the environment and better economically. The proposed West Valley Campus will allow COD to show leadership in meeting or exceeding federal, state, county and municipal sustainability policies.

3. How can COD build and expand in the midst of budget cuts?

This is a legitimate concern that requires a multifaceted answer.

- In 2004, voters overwhelmingly approved a bond measure that authorized COD to sell $346.5-million in bonds to be guaranteed by local property tax revenues. Voters agreed to fund renovation of COD buildings and infrastructure, to build necessary new facilities, and establish permanent campuses in the east and west areas of the Valley. What followed was nearly four years of planning, design, and the lengthy approval process required by California.
- By law, the bond proceeds can only be used for acquisition of land and construction, including equipment and furnishings ('capital expenditures'). A volunteer committee of citizens oversees the spending and assures no bond money is used for salaries or operations ('operational expenditures' which are funded by the state).
- Penalties would accrue if COD failed to complete the bond-approved projects within a certain length of time, and the bonds would become taxable to those who purchased them.
- The original campus was completed 50 years ago; Measure B was designed to meet the needs of the Valley for the next 50 years. Stopping development and construction now would cost time and money.

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- With the global economic downturn, there has never been a better time for a building program because we are consistently experiencing good prices on construction and services, allowing our funding to stretch further.

4. What programs will be offered at the new West Valley Campus?

To serve the needs of the West Valley, COD has tentatively identified four educational 'pillars' that each present significant opportunities for partnerships with business, industry, and other educational institutions: 1. Hospitality & Tourism; 2. Media & the Arts; 3. Allied Health; 4. Sustainability Technology. COD's Educational Master Planning process will determine the mix of programs to be phased in at the West Valley Campus.

5. Why will *GreenPark* be located on the campus?

About half of the property is envisioned as an 'energy center'–named *GreenPark*–that will feature sustainable energy-generating systems developed, constructed and operated by Southern California Edison (SCE). Photovoltaic solar technologies will be used because of the available land area, height restrictions, proximity to a residential neighborhood, and a mission to promote sustainable use of water resources. SCE will also use the site for controlled research & development, and alternative energy training programs to help the state move toward a cleaner energy future. SCE's solar park is expected to generate an estimated 10 MWp (dc), megawatts on peak, which is enough to power approximately 5,200 homes at a point in time. The partnership lease with SCE will provide a revenue stream for COD to develop programs and services at the West Valley Campus

6. What is meant by integrated sustainability?

Sustainability, as applied to the West Valley Campus project, moves beyond "simply living within available resources" to a strategy of designing a holistic campus that is compatible with, and learns from ("mimics") desert ecology, emphasizing conservation, efficiency, recovery of wastes, adaptation, and regeneration. A desert-inspired design concept for the West Valley Campus might look like: a campus designed like a box canyon, with a shaded south side and wind protection, photovoltaic solar panels that create shade and energy, daylight from the north, a storm water reservoir to create evaporative cooling, and desert landscaping.

7. Are there examples of integrated sustainability building designs at other California colleges?

There are many bond-driven building and energy retrofit projects at colleges in California that address specific environmental features and conditions. For examples, please visit Directory of Sustainability Programs at California Community Colleges: www.green-technology.org/ccsummit/directory.html.

8. How will COD's West Valley Campus be different?

Because the new West Valley Campus is a tabula rasa ('clean slate'), COD has the opportunity to take an integrated approach to campus planning, facility design and construction, facility operation, and campus management. West Valley Campus plans to deal with sustainability at a building scale, a land development scale, and in a community context. This holistic approach will address sustainability issues such as waste management, water conservation, energy efficiency and reduction, and incorporate renewable energy systems to create an integrated sustainable teaching and learning environment that is environmentally and socially responsible, and economically viable.

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9. What is a solar electric or photovoltaic (PV) system and how does it work?

Solar electric or photovoltaic (PV) technology transforms the sun's energy into electrical energy. When sunlight strikes an array of solar panels, electrons are freed by the interaction of sunlight with semiconductor materials (typically silicon) to create electricity. Solar cells produce direct current (dc). Appliances and machinery, however, operate on alternating current (ac), as supplied by utility companies. The dc energy produced by the solar panels is transformed by inverters into ac energy, which is fed into the utility's grid to help power houses and businesses.

10. Will the solar panels contain toxic materials such as Cadmium?

The panels SCE plans to use for the *GreenPark* project contain no toxic materials.

11. What about danger of electromagnetic radiation?

There are many sources of power frequency electric and magnetic fields (EMF), including home or building wiring, electrical appliances, and electric power transmission and distribution facilities. There have been numerous scientific studies conducted about the potential health effects of EMF; however, after 30 years of research, health hazards have not been established to exist.

12. Will the solar panels generate extra heat in the neighborhood?

No. Solar photovoltaic panels will not cause an increase in the ambient air temperature on or near the *GreenPark* site.

13. Will the solar field generate noise?

No. There is no appreciable noise associated with the electricity generation process using photovoltaic panels of the type that SCE plans to install in *GreenPark*. The solar panels to be used will not move to track the sun.

14. Will the solar panels cause sun reflection?

No. While some solar panels contain mirrors, the photovoltaic panels to be used at *GreenPark* will not be reflective.

15. Can the high winds in our area blow down the solar panels?

GreenPark will be engineered and constructed to withstand high winds of the type that are common in the north Palm Springs area.

16. What about the height of the solar array?

The low profile of *GreenPark* will have no appreciable impact on surrounding views.

17. How will industrial-type development adjacent to a residential community affect values of surrounding properties?

COD believes that its new West Valley Campus will be an asset to the north Palm Springs area.

18. What are COD's Integrated Sustainability Guidelines?

The Guidelines establish five broad goals for the West Valley Campus: 1. Zero waste; 2. Sustainable hydrology; 3. Net-zero energy utilization/energy generation; 4. Carbon neutral; 5. Ecological regeneration.

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19. How much will it cost to build the new campus?

COD's Bond program includes $40-million for Phase 1 of the West Valley Campus, including infrastructure development of the entire 119-acre site. Future phases of the campus will be funded from other sources, including revenues from *GreenPark*.

20. When will design and construction of Phase 1 start?

An architectural integrated design team has been appointed. The team consists of Santa Monica architectural firm *HGA* partnered with local architect Lance O'Donnell of *o2 Architecture*; leading Coachella Valley firms *RGA Landscape Architects* and *MSA Consulting, Inc*.; and construction management firm *Sundt Construction, Inc*. Design of the campus, followed by the necessary state approvals including Division of the State Architect (DSA) that approves all community college building plans, will take approximately 2 years. Construction is expected to start in 2012 and take 2 years. A tentative opening for classes is slated for September 2014.