

The Regents of the University of California

COMMITTEE ON GROUNDS AND BUILDINGS

July 14, 2009

The Committee on Grounds and Buildings met on the above date at UCSF–Mission Bay Community Center, San Francisco.

Members present: Regents Johnson, Kozberg, Makarechian, and Schilling; Ex officio member Yudof; Advisory members Hime and Powell

In attendance: Regent Kieffer, Associate Secretary Shaw, Principal Counsel Quenneville, Interim Provost Pitts, Executive Vice President Lapp, Vice President Lenz, Chancellors Blumenthal, Kang, and Vanderhoef, and Recording Secretary Harms

The meeting convened at 2:45 with Committee Chair Schilling presiding.

1. **APPROVAL OF MINUTES OF PREVIOUS MEETING**

Upon motion duly made and seconded, the minutes of the meetings of February 3 and March 17, 2009 were approved.

2. **CONSENT AGENDA**

A. *Amendment of the Budget for Capital Improvements and the Capital Improvement Program, King Hall Renovation and Expansion Project, Davis Campus*

The President recommended that:

- (1) The 2009-10 Budget for Capital Improvements and the Capital Improvement Program be amended as follows:

From: Davis: King Hall Renovation and Expansion – preliminary plans, working drawings, and construction – \$21,849,000, to be funded from State funds (\$17,925,000) and gifts (\$3,924,000).

To: Davis: King Hall Renovation and Expansion – preliminary plans, working drawings, and construction – \$27,997,000, to be funded from State funds (\$17,925,000), gifts (\$6,148,000), and campus funds (\$3,924,000).

- (2) The Officers of the Regents be authorized to execute all documents necessary in connection with the above.

B. *Amendment of the Budget for Capital Improvements and the Capital Improvement Program and Approval of External Financing, Parking Structure III, Davis Medical Center, Davis Campus*

The President recommended that:

- (1) The 2008-09 Budget for Capital Improvements and the Capital Improvement Program be amended as follows:

Davis: Parking Structure III – preliminary plans, working drawings, construction and equipment – \$46,515,000, to be funded from external financing (\$31,000,000) and parking reserves (\$15,515,000)

- (2) The President be authorized to obtain external financing not to exceed \$31,000,000 to finance the Parking Structure III project. The President shall require that:

- a. Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.
- b. As long as the debt is outstanding, the UC Davis Sacramento Campus Parking System revenues shall be maintained in amounts sufficient to pay the debt service and to meet the related requirements of the authorized financing.
- c. The general credit of the Regents shall not be pledged.

- (3) The Officers of the Regents be authorized to execute all documents necessary in connection with the above.

C. *Amendment of the Budget for Capital Improvements and the Capital Improvement Program and Approval of External Financing, Weyburn Terrace Graduate Student Housing, Los Angeles Campus*

The President recommended that:

- (1) The 2009-10 Budget for Capital Improvements and the Capital Improvement Program be amended to include the following project:

Los Angeles: Weyburn Terrace Graduate Student Housing – preliminary plans, working drawings, construction, and equipment – \$121,415,000, to be funded from external financing (\$109,915,000) and from the Los Angeles campus' Housing Net Revenue Fund Reserves (\$11,500,000).

- (2) The President be authorized to obtain external financing not to exceed \$109,915,000 to finance the Weyburn Terrace Graduate Student Housing project. The President requires that:
 - a. Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.
 - b. As long as the debt is outstanding, housing net revenues from the Los Angeles campus shall be maintained in amounts sufficient to pay the debt service and to meet the related requirements of the authorized financing.
 - c. The general credit of the Regents shall not be pledged.
- (3) The Officers of the Regents be authorized to execute all documents necessary in connection with the above.

D. *Amendment of the Budget for Capital Improvements and the Capital Improvement Program and Approval of External Financing, Anna Head West Student Housing, Berkeley Campus*

The President recommended that:

- (1) The 2009-10 Budget for Capital Improvements and the Capital Improvement Program be amended to include the following project:

Berkeley: Anna Head West Student Housing – preliminary plans, working drawings, construction, and equipment – \$69,870,000, to be funded from external financing (\$63,470,000) and Berkeley’s Residential and Student Services Program Net Revenue Fund Reserves (\$6,400,000).

- (2) The President be authorized to obtain external financing not to exceed \$63,470,000 to finance the Anna Head West Student Housing project. The President shall require that:
 - a. Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.
 - b. As long as the debt is outstanding, Berkeley’s Residential and Student Services Program net revenues and reserves shall be maintained in amounts sufficient to pay the debt service and to meet the related requirements of the authorized financing.
 - c. The general credit of the Regents shall not be pledged.

- (3) The Officers of the Regents be authorized to execute all documents necessary in connection with the above.

E. *Certification of Environmental Impact Report and Approval of Design, East Campus Infill Housing, Santa Cruz Campus*

The President recommended that, upon review and consideration of the environmental consequences of the proposed project, the Committee:

- (1) Certify the Environmental Impact Report.
- (2) Adopt the Findings, Mitigation Monitoring and Reporting Program, and Statement of Overriding Considerations.
- (3) Approve the design of the East Campus Infill Housing project, Santa Cruz campus.

F. *Approval of Sewer System Management Plans*

The President recommended approval of the Sewer System Management Plans.

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Committee Chair Schilling noted that for each item on the consent agenda involving environmental issues, the Committee members had been provided with environmental documentation prepared pursuant to the California Environmental Quality Act as well as with copies of all public comments received and responses prepared by the University. The members of the Committee reviewed and considered all of the documents and comments, and balanced the specific benefits of each project against any unavoidable adverse environmental effects.

Upon motion duly made and seconded, the Committee approved the President's recommendations and voted to present them to the Board.

Chair Schilling addressed the Committee regarding a new proposal for formatting items. She pointed to a sample done for item GB1E, East Campus Infill Housing, Santa Cruz Campus, on the consent agenda. The alternative format uses a chart form. She would like to adopt the chart format for future presentations in order to save time for both the Committee and the campuses. She asked that the Committee members study the chart in comparison to the standard presentation format and respond to her if they had any changes or concerns. She informed the members that, barring any objections, she intended to use the chart format instead of the narrative format in the future.

3. **ACCEPTANCE OF 2008-18 CAPITAL FINANCIAL PLAN AND PHYSICAL DESIGN FRAMEWORK AND AUTHORIZATION TO PARTICIPATE IN THE PILOT PHASE OF THE REDESIGNED PROCESS FOR CAPITAL IMPROVEMENT PROJECTS, DAVIS CAMPUS**

The President recommended:

- A. Acceptance of the *UC Davis 2008-18 Capital Financial Plan* and the *Physical Design Framework*.
- B. Authorization of the Davis campus to participate in the Pilot Phase of the Redesigned Process for Capital Improvements Projects on the Davis campus. Capital projects on the Sacramento Campus, home of the UC Davis School of Medicine and Health System, will not participate in the pilot phase pending completion of a new Long Range Development Plan and Physical Design Framework.

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Chancellor Vanderhoef remarked to the Committee that this presentation would be the last capital construction proposal he would be bringing before the Board. He observed that despite the challenging economic environment, he was pleased to present an item that anticipates the future of the Davis campus.

The Chancellor reported that the UC Davis of 2009 is robust, diverse, and much larger than it was when he first arrived at the campus 25 years ago. In the last 15 years, UC Davis has added over four million square feet of facilities with a value of over \$2 billion dollars; despite the growth, UCD has maintained a campus environment that is welcoming and collaborative. Chancellor Vanderhoef explained that the plans he was presenting were intended to blend practicality and optimism and to capture the values that make UC Davis an extraordinary learning community. In addition, he informed the Committee that the campus had undertaken a dramatic reorganization to ensure that its processes are fully integrated and that they will lead to the best possible outcomes.

The first document presented was the UC Davis ten-year Capital Financial Plan; the Chancellor observed that past iterations of the ten-year plan had proven to be valuable tools for focusing the attention of the vice chancellors and deans on both the short-term and long-term needs of their units. Chancellor Vanderhoef pointed out that the Plan had been prepared during a period of great uncertainty; the State's ability to continue past levels of financial support for operations and capital needs is questionable. In response, UCD began a comprehensive budget review process in the fall to evaluate a fundamental restructuring of its business practices. In addition, the campus began reviewing proposed updates to the schools' and colleges' academic plans.

Chancellor Vanderhoef expressed excitement about the advent of a new chancellor on the Davis campus and noted that this transition further necessitated the creation of a flexible Capital Financial Plan that would allow the budget planning process to mature and that would enable the new campus leadership to pursue its priorities. The Chancellor remarked that the Plan preserves its flexibility in two ways; first, it is based on conservative assumptions about future State funding. The Chancellor explained that the campus identified areas of priority, rather than individual projects. For example, the campus has substantial needs for renovations and infrastructure renewal; the Plan highlights those needs and provides placeholder projects that will enable the Capital Plan to respond to academic planning and budget review processes as time passes.

Secondly, the Plan proposes no new commitments of centrally-funded campus debt. Chancellor Vanderhoef explained that debt service payments represent a dollar-for-dollar opportunity cost to the operating budget. The budget review process will help the campus determine where it wants to expend that opportunity and incur that cost. Because the Davis campus has access to dedicated funding sources, the plan does include new student facilities, as well as projects in support of Health Sciences on the Sacramento campus. The Chancellor offered that these projects not only provide important resources for students, faculty, and staff, but also provide a springboard for engagement with the Davis community.

Vice Chancellor Meyer will lead an annual update and assessment of the Capital Plan to ensure it continues to meet the teaching, research, and public service missions of the University. The results of this process will be incorporated into the annual Regents' budget process for review.

The second document presented to the Committee was the Physical Design Framework for the Davis campus. The Chancellor pointed out that the Physical Design Framework is built around a blended foundation of characteristics that make UC Davis unique and cohesive. These qualities are essential to capturing the values of the campus and expressing these values in the physical environment.

Chancellor Vanderhoef informed the Committee that UCD had identified five layers of the campus framework that knit together sustainability values, planning concepts, and the design of campus buildings and places. He emphasized that this integration is intentional; the campus environment is not experienced in separate chapters, but as a whole.

The first framework idea highlighted by the Chancellor was the value of community participation. He commented that the Davis campus and community are legendary for their high levels of engagement. Citing the 40-year history of the student-run bus system, UCD's annual Picnic Day, and the community participation in the campus' recent centennial celebration, Chancellor Vanderhoef emphasized that a sustainable community must cultivate people who value public life. Faculty and staff volunteer on campus and in the community for the betterment of their society. He asserted that the Davis campus environment must nurture this value through the design of public spaces that encourage community interaction.

The Chancellor listed clean transportation as the next element of the framework, and that the daily to-and-fro of the 50,000 member campus community is the most critical element of that segment. Chancellor Vanderhoef remarked that bicycles and double-decker buses have been long-standing symbols of UC Davis and reminded the Committee that the City of Davis was the first city in the country to create bike lanes on public streets. Furthermore, the city recently was named the first platinum-level bicycle community in the United States. The Chancellor stressed that the campus' physical environment must continue to respond to, and support, the use of clean transportation, and that UCD maintains an extensive network of bike paths and embraces a boulevard of buses and bikes as a fundamental aspect of the campus Plan.

The third key element in the framework is the UC Davis arboretum. Calling it a "much-beloved landscape," the Chancellor explained that the arboretum, which lies along a stream that runs over a mile-and-a-half through the central campus, is a place where the natural environment dominates the man-made environment. He pointed out that the arboretum plays an important role in the academic community because it is a place where the campus can test its capacity to design in harmony with natural systems.

The neighborhoods and districts where people live and work comprise the fourth framework concept. In discussing the academic and residential districts, Chancellor Vanderhoef emphasized that each had its own network of places designed to heighten opportunities for people to interact and learn in positive, productive ways.

The fifth and final framework idea focused on the importance of physically connecting the campus to the communities around it. The Chancellor observed that the campus shares borders with the city, regional communities, the county, and – by virtue of the nearby freeways – the state. The plan highlights the importance of physically keeping UCD's doors open to the surrounding entities. Chancellor Vanderhoef affirmed that the greatest purpose of the University is to serve the needs of society; he stated that the Davis campus will maintain openness as a fundamental value in its programs and places.

The Chancellor took a moment to thank Regent Kozberg for her long-standing input and participation in the development of Davis as a place for academic and social collaboration. To sustain this value, the campus actively fosters interaction in its interior and exterior spaces: chance meetings in the hallway or lobby help people connect and bring the whole campus community together.

Chancellor Vanderhoef informed the Regents that UC Davis has outlined a process to ensure that its people and processes are functionally integrated and connected. The budget unit, which coordinates support for the academic planning process, capital planning, campus planning, architects, engineers, facilities management, the arboretum, and the newly-established Environmental Stewardship and Sustainability unit have all been integrated for the first time under the leadership of one person, John Meyer, the Vice Chancellor of Resource Management and Planning. The Chancellor noted that UCD is already seeing tangible benefits from this new organizational structure.

The Chancellor reminded the Regents about the campus' West Village Neighborhood, which they had approved in 2006. He informed them that UCD had recently broken ground on this innovative campus community. The original motivation for the project was to perpetuate the opportunity for students, faculty, and staff to live locally. However, he was pleased to announce that the West Village has evolved with a new plan to supply and use local solar and biowaste energy to attempt development of the first community in the country to have a zero-net energy system. Chancellor Vanderhoef explained that the campus would leverage faculty expertise in energy efficiency, heating, cooling, lighting, and biomass technologies to supply local renewable power equal to, or greater than, the energy consumed by the community. In addition, the California Energy Commission recently awarded a \$2 million dollar grant in support of the project's implementation.

Chancellor Vanderhoef expressed his gratitude for the opportunity to serve as chancellor, and his pride in his interactions with the University and with the Regents.

Regent Kozberg praised the integration of the plan and told the Chancellor that she intended to keep it as an example. The Chancellor thanked her and again acknowledged her important role in its final version.

President Yudof agreed with Regent Kozberg, calling the campus spectacular and remarking that Chancellor Vanderhoef's role over the last 25 years had been magnificent.

Regent Johnson recalled that she has lived in the Central Valley a long time and has watched UC Davis grow tremendously during Chancellor Vanderhoef's tenure. She asserted that the Davis plans are evidence of the exceptional leadership of the Chancellor and his staff. She congratulated the Chancellor on his retirement and wished him well.

Committee Chair Schilling observed that Chancellor Vanderhoef was leaving an incredible legacy and congratulated him on his successful leadership of UC Davis.

Upon motion duly made and seconded, the Committee approved the President's recommendation and voted to present it to the Board.

4. **ACCEPTANCE OF 2009-19 CAPITAL FINANCIAL PLAN AND PHYSICAL DESIGN FRAMEWORK AND AUTHORIZATION TO PARTICIPATE IN THE PILOT PHASE OF THE REDESIGNED PROCESS FOR CAPITAL IMPROVEMENT PROJECTS, LOS ANGELES CAMPUS**

The President recommended:

- A. Acceptance of the *UCLA 2009-19 Capital Financial Plan* and the *Physical Design Framework*.
- B. Authorization of the Los Angeles campus to participate in the Pilot Phase of the Redesigned Process for Capital Improvement Projects.

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Vice Chancellor Waugh remarked that UCLA's ten-year Capital Financial Plan and Physical Design Framework reflect a legacy carried forward since the completion of the campus' first four buildings in 1929. Now a mature campus, UCLA has over 200 buildings supporting the largest student-faculty research enterprise, clinical enterprise, and physical plan in the UC system.

The Vice Chancellor explained that UCLA's Capital Financial Plan is guided by three major planning activities: the Long Range Development Plan (LRDP), the Physical Design Framework, and the Campus Academic Plan. These plans work together to ensure that individual capital projects are approved and carried out in a manner that supports the orderly development of UCLA's highly-constrained land, that preserves the unique campus aesthetic, and that promotes UCLA's overall academic goals. In addition, four major principles drove the development of UCLA's plan: academic excellence, civic engagement, diversity, and financial security. Vice Chancellor Waugh noted that he is currently guiding the development of a new Campus Academic Plan, a draft of which was provided to the Regents as an appendix to the Capital Plan.

The Academic Plan identifies three areas that establish the context for the campus' capital planning efforts: transforming UCLA into a residential/academic community by housing faculty, staff, and graduate students close to campus; continuing to extend UCLA's leadership in problem-based teaching and research; and by developing UCLA's leadership in new forms of collaborative, multidisciplinary research in teaching.

Mr. Waugh informed the Committee that UCLA had recently amended its Long Range Development Plan, which serves as the comprehensive policy and land use plan for the physical development of the campus. Under the Long Range Development Plan, UCLA has adhered to a voluntary limit on parking and vehicle trips since 1990. The LRDP also incorporates provisions of the 2008 Climate Action Plan through initiatives to reduce greenhouse gas emissions. The Vice Chancellor explained that the campus is preparing to create a new LRDP through 2019 in order to align its timeframes with those of the Academic Plan and the Capital Plan.

The Vice Chancellor informed the Regents that the ten-year Capital Plan contains three strategic initiatives: completion of the seismic correction program, transformation of UCLA into a residential academic community, and building a sustainable campus.

Over the past two decades, the UCLA capital program has been dominated by its seismic safety commitments. Vice Chancellor Waugh reported that since the mid-1980s, 92 percent of UCLA's State capital funding has been allocated to seismic and life-safety projects. The campus has repaired or replaced 36 structures, representing 4.3 million square feet of space. Seismic work is currently in progress on eight other structures, totaling 1.4 million square feet. Fourteen structures needing seismic work remain, for a

total of 1.7 million square feet; virtually all of that space is in the Center for Health Sciences.

The Vice Chancellor indicated that the campus' ten-year plan provides for the mitigation of all of the remaining seismic hazards by 2019. However, achieving that goal will require virtually all of UCLA's planned State funds for the decade, \$800 million, in addition to nearly \$200 million in campus resources. Mr. Waugh explained that the remaining seismic work was divided into two critical paths: the Campus Health Sciences (CHS) south tower renovation, and the Life Sciences Building renovation. The CHS south tower has been 90 percent vacant for over a year, and the Life Sciences Building will be vacated in mid-2010, upon completion of a replacement building. Both projects are currently delayed and at risk because of a lack of State funds. The Vice Chancellor emphasized that even if the State resumes funding, the scale of the remaining seismic correction program is so significant that no State funds will be available to support any other capital priority at UCLA for the foreseeable future. He stated that the Regents must address the shortfall because it has serious implications for UCLA's academic programs.

Over several decades, UCLA has been transformed from a commuter school to a residential one, accommodating over 11,000 students on campus, and approximately 2,500 students in UCLA-owned off-campus housing. The Student Housing Master Plan for 2007-17 anticipates additional undergraduate and graduate student housing. Vice Chancellor Waugh explained that the campus needed to provide additional student housing to enhance the overall campus experience for students and also to meet the LRDP sustainability goals.

UCLA's Capital Plan extends the housing strategy to faculty and staff. Vice Chancellor Waugh reported that local housing, transportation, and schools remain significant barriers to UCLA's ability to recruit and retain top-quality faculty and staff. The campus has envisioned the development of up to 800 new employee housing units on or near campus, consisting of a range of housing types. The Vice Chancellor remarked that this is a very exciting prospect, and one that will be a primary capital development focus over the next decade.

UCLA is also committed to achieving a minimum Leadership in Energy and Environmental Design (LEED) Silver certification for all new construction and major refurbishments; currently, 17 projects are targeting this goal. The UC Sustainability Policy sets a variety of milestones, and UCLA has met many and is well on the way towards meeting the rest. The campus' Climate Action Plan identifies initiatives to reduce emissions below the targeted levels in advance of the timeframe established in UC policy. Mr. Waugh cautioned that the campus will be challenged to find ways to continue to reduce its carbon footprint as the campus expands. However, the incorporation of energy-efficient measures in UCLA's new facilities has already resulted in a reduction in the amount of energy used on a per-square-foot basis, despite recent campus growth.

Campus Architect Averill presented a series of slides illustrating key elements of the Physical Design Framework. Starting with an aerial photograph taken in 1929 of the first

UCLA buildings, Mr. Averill illustrated how UCLA has grown into a dense, urban campus, with its 419 acres representing the smallest land area of any of the full-service campuses in the system.

Through a series of photographs, Mr. Averill demonstrated how UCLA's structures have been developed to echo the colors and aesthetics of the historic core of the campus. Other details, including signage, lighting, benches, and trash receptacles are consistent throughout campus, resulting in the creation of individual structures that clearly belong to a family of buildings on the campus.

Mr. Averill noted that another key aspect of the Physical Design Framework is the treatment of open space and landscape. The region's Mediterranean climate permits year-round use of plazas, courtyards, gardens, and walkways. Similarly, the landscape can maintain a rich diversity of plant life without overusing water resources.

Vice Chancellor Olsen addressed the fiscal realities of the plans, providing details on financing as well as pointing out areas of concern. He explained that the ten-year Capital Financial Plan summarizes specific capital investments that the campus will employ in a manner that is consistent with the Physical Design Framework and the Long Range Development Plan. The Capital Financial Plan calls for an investment of approximately \$4.8 billion over the ten-year period. Mr. Olsen presented a slide illustrating the primary funding sources that UCLA is identifying to support its projects. The largest single portion of the financial burden would be borne by external debt financing totaling \$2.7 billion. The campus is anticipating the receipt of approximately \$800 million in State funds, and has identified approximately \$772 million in gift funds for specific projects. He commented that the seismic program and fire safety infrastructure are the top priorities for available State funding, principally for the repair of the Center for Health Sciences. Mr. Olsen explained that this would result in an essential elimination of State funds for investments in other parts of the academic program; those programs would need to be funded by gifts. Housing will be funded by debt.

Regent Kozberg questioned the Capital Plan's assumptions. Mr. Olsen responded that they were very realistic, though they assumed State funding for the seismic work. The tremendous demand for housing, on the other hand, generates resources to service the debt of that construction.

Regent-designate Hime asked if the campus was building to LEED certification. Mr. Averill confirmed that it would be.

Regent Kozberg requested clarification regarding the anticipated workforce housing. Mr. Olsen explained that the project was still in the planning stages, and that UCLA was surveying faculty and staff to determine the demand for various types of facilities. He added that the process of evaluating a site for the housing was complicated by the discussion of a city subway terminal in the vicinity.

Committee Chair Schilling asked if the campus would consider a private-public partnership for the housing, such as that at the Irvine campus. Mr. Olsen replied that it is an option UCLA would consider.

Regent Kozberg asked if the campus was accountable to the City of Los Angeles in its planning. Mr. Olsen informed the Committee that the zoning power for the campus is held by the Regents, not by the City.

Regent Makarechian questioned the estimated cost of the construction. Mr. Olsen described the nature of the proposed housing and the infrastructure required for the units. He noted that UCLA had not bid a major project recently, but that some of the smaller projects under development had received bids far below the estimates due to the languishing economy. While he was hesitant to make any predictions regarding future costs, he expressed optimism that as UCLA moves a number of the larger projects into the marketplace, the campus will receive very favorable estimates.

Upon motion duly made and seconded, the Committee approved the President's recommendation and voted to present it to the Board.

5. **AMENDMENT OF THE BUDGET FOR CAPITAL IMPROVEMENTS AND THE CAPITAL IMPROVEMENT PROGRAM AND APPROVAL OF EXTERNAL FINANCING, PAULEY PAVILION RENOVATION AND EXPANSION, LOS ANGELES CAMPUS**

The President recommended that:

- A. The 2008-09 Budget for Capital Improvements and the Capital Improvement Program be amended to include the following project:

From: Pauley Pavilion Renovation and Expansion – preliminary plans – \$6.5 million, to be funded from gift funds.

To: Pauley Pavilion Renovation and Expansion – preliminary plans, working drawings, construction, and equipment – \$185 million, to be funded from gift funds (\$100 million), external financing (\$60 million), Student Programs, Activities, and Resources Center (SPARC) fee (\$15 million), and Student Seismic fee (\$10 million).

- B. The President be authorized to obtain external financing not to exceed \$60 million to finance the Pauley Renovation and Expansion project. The President requires that:

- (1) Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.
- (2) As long as the debt is outstanding, the UCLA basketball program net revenues shall be maintained in amounts sufficient to pay the debt service and to meet the related requirements of the authorized financing.

- (3) The general credit of the Regents shall not be pledged.
- C. The President be authorized to obtain standby financing not to exceed \$47 million and interim financing not to exceed \$50 million prior to awarding a construction contract for any gift funds not received by that time and subject to the following conditions:
 - (1) Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.
 - (2) Repayment of any debt shall be from gift funds. If gift funds are insufficient, and some or all of the debt remains outstanding, then the UCLA campus' share of the Unrestricted Short-Term Investment Pool (STIP) shall be maintained in amounts sufficient to pay the debt service and to meet the related requirements of the authorized financing.
 - (3) The general credit of the Regents shall not be pledged.
- D. The Officers of the Regents be authorized to execute all documents necessary in connection with the above.

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

For discussion, see item 6, below.

6. ADOPTION OF MITIGATED NEGATIVE DECLARATION, AMENDMENT OF LONG RANGE DEVELOPMENT PLAN, AND APPROVAL OF DESIGN, PAULEY PAVILION RENOVATION AND EXPANSION, LOS ANGELES CAMPUS

The President recommended that, upon review and consideration of the environmental consequences of the proposed project as evaluated in the Mitigated Negative Declaration, the Committee on Grounds and Buildings:

- A. Adopt the Initial Study/Mitigated Negative Declaration.
- B. Adopt the Findings and Mitigation Monitoring Program.
- C. Amend the UCLA 2002 Long Range Development Plan to transfer 52,000 gsf from the Core zone to the Central zone to accommodate the proposed project.
- D. Approve the design of the Pauley Pavilion Renovation and Expansion project, Los Angeles campus.

[Background material, including the Mitigated Negative Declaration, Findings, and Mitigation Monitoring and Reporting Program, was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Chancellor Block reminded the Committee that questions had been raised several months ago regarding an earlier design concept for the Pauley Pavilion and whether it adequately addressed the facility's deficiencies. In response to these questions, the Chancellor directed the project team to undertake an operational design review of the proposed renovation. The outcome of that process is a stronger and more flexible design.

The Chancellor also pointed out that some members of the UCLA community had suggested that the project should be deferred given the University's budget crisis. These individuals argue that UCLA should not make a major investment in an athletic facility at the same time it is eliminating courses, cutting salaries, and laying off staff. Chancellor Block asserted that none of the funds proposed for the Pavilion can be used to mitigate the impact of the State budget crisis. The project will be financed entirely from gifts raised for the project, athletic revenues, and existing student fee revenues earmarked for student activity facilities. In fact, deferring the project would increase the project costs. The market is advantageous at this time; recent bids for other UC projects have been fallen as low as 40 percent below pre-bid estimates. Proceeding now will save millions on this project as well as support California's struggling design and construction industry.

Chancellor Block acknowledged the importance of the symbolism of this project, and maintained that UCLA is first and foremost a research university. Since its inception, it has struck the right overall balance between athletics and academics; the Chancellor did not intend for the Pauley Pavilion project to tip the balance in the wrong direction. But, he noted, the Pavilion is an important symbol of UCLA's overall reputation for excellence, and the facility is clearly aging. While best known for championship athletic programs, the facility supports campus needs for intramural sports, commencement celebrations, and staff assembly meetings, as well as public events such as concerts and presidential debates.

The Chancellor informed the Regents that the renovation of Pauley Pavilion, now 45 years old, is overdue. Electrical, plumbing, mechanical, and seismic systems have exceeded their useful lives and need to be replaced and upgraded. The Pavilion also lacks modern safety features; the uneven step aisles, lack of handrails, poor patron circulation, shortage of restrooms and concessions, dated athletic support space, and poor sight lines all need to be addressed. He maintained that the proposed improvements are appropriate for a collegiate arena and would not include other amenities, such as luxury boxes, found in professional sports arenas.

The current design and fundraising strategy have the full support of key campus leaders and the Campaign of Champions Executive Committee. The Committee is comprised of former student athletes and UCLA community leaders; Coach John Wooden is the honorary chair of the committee. The Chancellor noted that donors and sponsors have enthusiastically committed over \$50 million to support this project, and that the

Executive Committee and the fundraising team are cultivating many additional major gift prospects and sponsors; the campus is confident that these entities will support the campaign.

Vice Chancellor Olsen recalled that the Committee's previous action on the Pauley Pavilion project involved the approval of the gift campaign for \$100 million as well as, in November 2008, approval to proceed with preliminary plans. He explained that the current items involved the following actions for the Pauley Pavilion: a project amendment and approval of external financing to establish the entire budget and scope for the project, and the adoption of the mitigated negative declaration and approval of the project design.

Mr. Olsen reminded the Regents that Pauley Pavilion was built in 1965 as a multipurpose arena, and that its multipurpose aspect presents the largest set of challenges in renovation. The facility is perhaps best known as a basketball arena, and a total of 38 NCAA championship teams have used it as a home court. However, it also plays host to a large number of campus and community events.

In addition to the deficiencies listed by the Chancellor, Mr. Olsen mentioned the locker rooms and team facilities are inadequate to support contemporary athletics, the facility lacks a multipurpose reception space for pre- and post-game events, the seating is obsolete and aged, and the facility is currently rated "fair" under UC seismic standards – the proposed project would raise it to "good." Finally, fire and life safety systems are obsolete and need to be upgraded.

Mr. Olsen remarked that the proposed project involves an expansion of approximately 57,000 square feet in addition to the renovation of the existing 180,000-square-foot facility. The plan calls for construction to begin in February 2010 and to be completed in October 2012. The sequencing of the construction will enable the Pavilion to be closed for only one season – from April 2011 through October 2012; the campus will identify alternate on- and off-campus facilities for the events that take place during that period.

The Vice Chancellor explained that the total project budget, including all soft costs, contingencies, and installed equipment is \$185 million, based on an estimate made in April 2009. Gifts raised specifically for the project will total \$100 million, \$52 million of which has already been committed. External financing will comprise \$60 million; Mr. Olsen noted that the debt service for that external financing will be borne entirely by revenues from the department of intercollegiate athletics. No campus operating revenues will be used for the project or in payment of its debt service. The remaining \$25 million will come from existing student fees specifically designated for the support of student facilities. Mr. Olsen emphasized that these fees may not be used for other types of facilities, and may not be used for faculty salaries or any other type of academic program on the UCLA campus.

Campus Architect Averill reported that when Pauley Pavilion was built in 1965, it was surrounded by open surface parking. However, as the campus has grown, the Pavilion has

become land-locked in terms of both renovation and expansion. Through a series of slides, Mr. Averill demonstrated how the Pavilion is dug into the ground, making the arena level approximately 30 feet below the exterior grade. He also showcased the new proposed seating, which is retractable, providing both more seating closer to the court and the ability to open more floor space as needed. The seating would also add handrails for safety and realign the aisles for a better line of sight. Other new features would be a mezzanine level with room for receptions, and an enclosed concourse with two lobbies. Mr. Averill then showed depictions of the exterior of the proposed remodel, highlighting the east side, which would be completely glass-enclosed, allowing continued view of the Pavilion's exposed truss.

Mr. Averill remarked that the project is targeting a Leadership in Energy and Environmental Design (LEED) Silver rating. The project itself promotes sustainability in that a renovation inherently has less impact on the environment than the construction of a new arena. Mr. Averill detailed some of the environmentally-conscious strategies that would be featured in the renovation, such as the use of natural ventilation to reduce the use of air conditioning, the significant use of recycled-content materials, and low-water-use plumbing fixtures and landscaping.

Mr. Averill noted that UCLA was also asking the Regents for approval of its mitigated negative declaration in relation to California Environmental Quality Act (CEQA) compliance. He also mentioned that the University received three comment letters which were addressed in the study.

Regent Johnson questioned the UCLA representatives regarding the financial feasibility of the renovation. She asked how soon the campus anticipated receipt of the gift funds for the project and when it might begin to draw down the external financing for the pledges not yet received. Mr. Olson remarked that the fundraising goal is \$100 million and that the campus currently has pledges totaling \$52 million. The remaining \$48 million has yet to be raised, and in the interim, UCLA is working with the Office of the President to secure stand-by financing through a commercial paper mechanism that will allow the campus to meet all of its cash flow requirements throughout the construction period without regard to receipt of the actual pledges. The Vice Chancellor added that UCLA had built the interest into the cost of the project, so the actual timing of the gift funds will not affect the campus' ability to stay on schedule for the project.

President Yudof made several comments on the design, saying that it was brilliant, and that it maintained the integrity of the original structure while improving its functionality and appearance. He expressed his satisfaction with the proposal but remarked that he would like to have one question publicly addressed. Recalling the cost and square footage of the remodel, the President noted that some individuals might find the renovation fairly expensive and wonder why UCLA did not construct a new facility instead. Mr. Olsen replied that the campus had spent a significant amount of time considering that option, but that – because the campus has such limited space – the original structure would have to be demolished and the new facility constructed in its place. The cost of such an undertaking would have been significantly greater than the proposed renovation, and

would also have resulted in the facility being closed for three years instead of one year. Mr. Averill added that the Pavilion is an important structure to the students, faculty, and staff of UCLA, and is eligible for listing on the National Register of Historic Places.

Regent Kozberg agreed that the proposed design was exemplary, and that UCLA had developed a unique ability to transform mundane structures into “jewels.” However, reflecting upon the cost of the renovation, she asked what other projects the Student Programs, Activities, and Resources fee might have been used to support if it were not being devoted to the Pauley renovation. Mr. Olsen responded that the project would not be displacing the construction of any particular site, but it would deplete resources to the point where future facilities would need a new resource for funding. He noted, however, that the Pauley Pavilion is actually the second project to avail itself of these fees, the first being the South Campus Student Center, which is receiving nearly half of its financing from the fees.

Regent Makarechian asked if the project would be eligible to receive funds under the aegis of historical restoration. Mr. Olsen said he would investigate the option, but that historical restoration funds were not part of the current financing plan. Mr. Averill clarified that the Pauley Pavilion is eligible for listing on the Register of Historic Places, but that it is not, as of this time, actually listed.

Regent-designate Hime wondered if the campus had considered putting solar panels on the roof of the redesigned structure. Mr. Averill stated that solar panels would add weight to the roof and would exceed the building’s structural capacity. He remarked that photovoltaic panels might be added later as part of a larger campus energy strategy. Mr. Olsen added that the project did include the replacement of the Pavilion’s heating, ventilation, and air conditioning systems, which would likely result in greater energy savings than the addition of solar panels.

Faculty representative Powell offered some concerns which had been brought to him and to Academic Senate Chair Croughan from the faculty. He reported that faculty are asking if the University is undermining its own message in going forward with this project in this time of extreme fiscal retrenchment. Chancellor Block responded that the campus had received similar inquiries and was sensitive to the faculty’s concerns. However, he reiterated that the project will have to be done at some point, and that it will be much more expensive to do in the future. He stressed that with the exception of the student fee fund, the funds for the Pavilion are private.

Committee Chair Schilling reported that the item requested adoption of the Mitigated Negative Declaration for the Pauley Pavilion at the Los Angeles campus. Each member of the Committee had been provided with environmental documents prepared pursuant to the California Environmental Quality Act which analyzed the impact of the proposed action, and with copies of all public comments received and responses prepared by the University. The members of the Committee had reviewed and considered the information contained in the environmental documents, including all comments received in writing or presented to the Committee to date.

Upon motion duly made and seconded, the Committee approved the President's recommendations and voted to present the recommendation in item 5 to the Board.

7. AMENDMENT OF THE BUDGET FOR CAPITAL IMPROVEMENTS AND THE CAPITAL IMPROVEMENT PROGRAM AND APPROVAL OF INTERIM FINANCING, CALIFORNIA MEMORIAL STADIUM (CMS) SEISMIC CORRECTIONS AND PROGRAM IMPROVEMENTS, BERKELEY CAMPUS

The President recommended that:

- A. The 2009-10 Budget for Capital Improvements and the Capital Improvement Program be amended to include the following project:

Berkeley: California Memorial Stadium (CMS) Seismic Corrections and Program Improvements – preliminary plans – \$18,300,000, to be funded from interim financing.

- B. The President be authorized to obtain interim financing not to exceed \$18,300,000, to finance the *California Memorial Stadium (CMS) Seismic Corrections and Program Improvements* project. The President shall require that:

- (1) Interest only, based on the amount drawn, shall be paid on the outstanding balance during the preliminary plans phase.
- (2) Repayment of any debt shall be from the Berkeley campus football program gross revenues and as long as the debt is outstanding, the Berkeley campus football program gross revenues shall be maintained in amounts sufficient to pay the debt service and to meet the related requirements of the authorized financing.
- (3) Among all the uses of the Berkeley campus football program gross revenues, debt service will be the priority.
- (4) The general credit of the Regents shall not be pledged.

- C. The Officers of the Regents be authorized to execute all documents necessary in connection with the above.

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Vice Chancellor Denton informed the Committee that the Berkeley campus was seeking approval for the preliminary plans for the California Memorial Stadium (CMS) program improvements and introduced Associate Vice Chancellor Gayle to provide a brief orientation.

Mr. Gayle showed a series of slides of the Stadium, its surroundings, and its anticipated appearance after renovation. Over 80 years old, CMS is uniquely challenged in that the Hayward fault runs directly under the Stadium, making it perhaps the only major assembly building in the UC system bisected by a major earthquake fault. The Associate Vice Chancellor informed the Regents that the goals of this series of projects are to resolve the seismic safety issues, to create a first-class athletic facility, and to integrate the site better with the campus.

Currently, the campus is undertaking a related project, the Student Athlete High Performance Center (SAHPC), which will help mitigate the seismic risk of day-to-day occupancy of the Stadium. Mr. Gayle remarked that up to 400 people work and train in CMS on a daily basis; completion of the Student Athlete High Performance Center (SAHPC) will provide students with an alternative venue in which to train while the Stadium is renovated. When the Student Athlete High Performance Center is completed, it will provide additional space and will help integrate the Stadium into the campus by creating a forecourt for CMS which will serve as a significant public gathering place.

Mr. Gayle commented that the item before the Committee would focus on raising the seismic rating of the west bowl of CMS to “good” while undertaking extensive programmatic improvements to make the Stadium a first-class collegiate football venue. A future project will raise the east bowl to the level of amenity commensurate with the west bowl, but since the east has no seismic risk, the need is not immediate.

Mr. Gayle pointed out that the total project cost, \$300 to \$325 million, is not insubstantial. He attributed part of the cost to the duration of the planning and revision process – more than five years – and to protracted legal action involving the SAHPC. Further adding to the cost are the geological investigations and structural reviews necessary given the location of the Stadium relative to the Hayward fault.

Vice Chancellor Brostrom informed the Regents that Berkeley would return in the fall for formal financing approval, and presented a preview of the financial strategy for the project. Mr. Brostrom explained that the campus would finance the seismic retrofit and renovation through tax-exempt bonds. The bonds would be secured by revenues generated under a new program, the Endowment Seat Program, which has already been launched. Approximately two-thirds of the cost will go to seismic renovation, and the remaining one-third will be applied to seat improvements and other amenities that are being used to bolster the Endowment Seat Program.

Mr. Brostrom commented that Berkeley’s Endowment Seat Program is possibly the first of its kind in collegiate athletics. It will not only provide a funding mechanism for the renovation and redevelopment the Stadium, but it will also create a long-term endowment which will provide a more stable funding source for UCB athletics in the future. The Vice Chancellor explained that the Endowment Seat Program enables interested fans and donors to pay – either up front over five years, or extended over 30 years – to secure seats in the Stadium. Mr. Brostrom advised that only 3,000 seats, about five percent of the total capacity, will be available through the program and that the donors will have those seats

for 40 to 50 years, depending on the term of their contracts. Thus far, the program has been exceptionally successful, with letters of intent for 63 percent of the seats, generating about \$160 million. The campus' financing model forecasted that the campus would require 68 percent of the seats sold by June 2010 to meet its funding goals; in essence, Berkeley is currently one year ahead of schedule. In addition to the Endowment program, the campus will receive approximately \$40 million in philanthropy and naming rights for the CMS project.

Regent-designate Hime enquired as to the level of seismic activity that would be likely to trigger a breakdown of the existing facility. He also asked to what level of soundness the proposed improvements would raise the structure. Mr. Denton explained that the improved Stadium would be equal to, or better than, a brand new building due to the extremely high volume of structural activity around the redesign. He reported that CMS would be able to endure an earthquake that has a chance of occurring once every 500 years, even one that was centered directly under the Stadium. In addition, the new structure would be designed to withstand up to six feet of fault-line displacement – fault rupture – in the event of a large earthquake. The Vice Chancellor elaborated, stating that the campus is currently completing an interim shoring project that will ensure structural stability if the earthquake should occur before the proposed project is finished.

President Yudof complimented the campus on the project and reiterated that Berkeley was taking substantial steps to mitigate the danger in the interim in order to ameliorate some of the risk for people attending football games in the near future.

Regent Makarechian requested an estimate of the total architectural cost as a percentage of the overall costs for the project, particularly in relation to fees. Mr. Gayle responded that the basic services fees would be approximately ten percent of the total cost of construction, not of the total project. Since the total construction cost is approximately \$200 million, Mr. Gayle estimated that the cost of the architect, and all consultants to the architect, would be less than \$20 million. Regent Makarechian pointed out that the campus was requesting \$18.3 million for preliminary plans; the Vice Chancellor detailed the elements of that charge, including fees, engineering, geological, and geotechnical studies, and all the campus costs associated with managing the project in the five years since the first study. Mr. Denton also pointed out that almost ten percent of the \$18.3 million is to pay for the interim shoring currently under way to ensure seismic safety prior to commission of the full project.

Upon motion duly made and seconded, the Committee approved the President's recommendation and voted to present it to the Board.

8. UPDATE ON WORK OF THE CLIMATE SOLUTIONS STEERING GROUP

UC Irvine Vice Chancellor Brase presented the Committee with an update on the Climate Solutions Steering Group, which was formed by Executive Vice President Lapp a year earlier.

Before beginning his presentation, Mr. Brase highlighted a correction to be made to the item, namely that Mr. Al Diaz was no longer with the University and that he had been replaced on the Steering Group by Ms. Meric Munn, the Director of Facilities Management at UCSF.

Mr. Brase drew the attention of the Committee to the charge of the Steering Group and highlighted the five key ideas embedded within it: climate change is a major challenge; large-scale solutions will likely be required; the solutions will have to be University-wide because they will go beyond the ability of individual campuses; new ideas will be required; and the Steering Group is meant to rapidly move concepts to implementation.

Mr. Brase outlined some background information regarding the various climate commitments in which the University participates. He started with Assembly Bill 32, which provides the foundation and framework for most of California's climate improvement planning, including that of the Air Resources Board. He remarked that the focus of many of the greenhouse gas goals is the year 2020; in addition, the Regents' policy sets an important milestone in 2014. While acknowledging the importance of these deadlines, Mr. Brase emphasized that the primary concern of the Steering Group is the climate neutrality which is set in both Regents' policy and is a function of the University's participation as signatory to the American College and University Presidents' Climate Commitment. Mr. Brase elaborated that climate neutrality is significantly more challenging than even the ambitious goals of 20 percent or 80 percent reduction; it is reduction to zero. The UC campuses that have grown the most since the baseline years of 1990, or in some cases 2000, will have to do more in order to reach both the milestones and ultimately zero.

The American College and University Presidents' Climate Commitment lists Scope One, Scope Two, and Scope Three emissions; Mr. Brase explained that the different scopes correlate to global warming effects that are either "direct," "indirect," or "other." Factors listed in the report include employee and student commutes, air travel, outsourced activities, contractor-based activities, and emissions related to purchased goods. It is a comprehensive list, and for the University, it translates into a significant global footprint.

The Vice Chancellor presented a slide listing the six greenhouse gases covered by the Kyoto Protocol. He speculated that the American Clean Energy and Security Act may require the addition of other gases to the list, and expressed the hope that State and federal reporting requirements would be in alignment. Mr. Brase explained that each gas is given a different weight – similar to a weighted average – based upon its global warming potential. Therefore, a gas that occurs in very small quantities on campus may be given great significance if it has very high global warming potential.

Mr. Brase then showed a slide depicting the greenhouse gas footprint for each campus. He pointed out that those sites with medical centers tended to have a higher total, and that the Davis campus total reflected both its medical center and its substantial agricultural operation. In total, the University is accountable for approximately 1.8 million metric tons (2,205 pounds) of carbon dioxide-equivalent (CO₂E) gas per year.

The Vice Chancellor informed the Regents that the most immediate action the campuses can undertake to reduce their carbon footprint is to create more on-campus housing. Students who live on campus not only do not commute, but are more likely than their off-campus counterparts to navigate the campus on foot, bicycle, or via campus transportation. Mr. Brase remarked that all of the campuses have been expanding, or have plans to expand, campus housing, and that those efforts will make a significant difference in the University's carbon footprint.

The Vice Chancellor cited the University's Strategic Energy Partnership as a second critical step in the overall CO₂E reduction efforts. Reminding the Regents of the Partnership, Mr. Brase offered that it could take six years of very aggressive energy retrofit projects to make a noticeable difference in UC's carbon footprint; however, once completed, that difference could be a reduction of 30 percent on some campuses.

Sustainable dining programs are a hallmark of the UC campuses, with the Santa Cruz and Davis sites receiving particular accolades for their performance. Similarly, Mr. Brase asserted that the University is "ahead of the curve" in regards to its sustainable procurement policies; he reported that UC has been buying Energy Star products as a matter of policy for approximately two years. The University's sustainable transportation programs have won some of the highest awards in the state, including the Governor's Environmental and Economic Leadership Award (GEELA) last November. Teleconferencing is becoming more common, and the administrative vice chancellors hold three out of every four meetings via teleconference.

Mr. Brase made particular mention of photovoltaic systems, which all of the campuses have embraced and incorporated. However, on-campus solar energy is not a panacea for the University. Using a slide of UC Irvine as an example, the Vice Chancellor illustrated which buildings could accommodate solar panels. Noting that approximately 20 percent of those shown already had panels, Mr. Brase continued that – even if Irvine were to install photovoltaic equipment on every eligible building – the campus would generate a scant five percent of the energy it uses in a year. Accordingly, the Vice Chancellor argued that the University will need to look off-campus to harvest the renewable energy necessary to sustain it. The best solar and wind resources in California are approximately 100 to 300 miles away from the campuses; this distance will prove a challenge to the University's plan for zero emissions. In addition to solar and wind power, UC Davis has the potential to use biomass for renewable energy because of the large agriculture operation.

Vice Chancellor Brase recalled that when the country's first campus climate action plans were being published, almost every one of them incorporated some energy retrofit projects. The intent was to "green up" transportation, dining services, and procurement, and to build Leadership in Energy and Environmental Design (LEED) Silver or Gold buildings. Any remaining problems would be remediated by the purchase of renewable energy credits (RECs); essentially, the institutions would "buy their way out" of energy obligations. However, observed Mr. Brase, this strategy has been losing favor in recent years. Many colleges and universities now believe that it is incumbent upon them to try to

do everything possible to solve the problem. The reason for this change in strategy is twofold. As a matter of principle, these institutions believe that it is better for them to try to solve the problem rather than to buy the solution. Secondly, according to Mr. Brase, is a question of economics. There is no way to determine the cost of an REC in 2014 or 2020; the amount might be unreasonable or even impossible for the University to afford. Conversely, UC could actually use the value of the RECs early on to help jumpstart some renewable energy projects. A third-party developer would sell the RECs for five years, and the proceeds would provide initial funding for energy-saving projects.

Mr. Brase used the current solar arrays on the campuses to illustrate the benefits the University can reap from a public-private partnership. Campus photovoltaic equipment is part of long-term solar power purchase agreements that run for 20 years. Such agreements could provide a financial foundation for large-scale and offsite projects.

Another cost and energy savings might be available through wind power at night. Six of the UC campuses have substantial thermal storage capabilities; if the University were to buy wind energy at night, which is less expensive and has fewer transmission constraints, it could be used to chill the stored water used for air conditioning during the day. Since air conditioning is one of the major sources of UC's carbon footprint, the savings in energy and expenses could be considerable.

Mr. Brase observed that the Steering Group had been studying the University's cogeneration plants, which are not only efficient but also have 20 years of financing left on them. Currently the plants run on natural gas; however, the Group is investigating the use of biofuel as a means to reduce their environmental impact.

Mr. Brase reminded the Regents that the immensity of the undertaking would necessitate partnerships with other systems, such as California State University. Broad-based linkages would mitigate some of the risks and add the economic resources that will make some of the ideas feasible. He noted that if the University is extremely successful, particularly with the Strategic Energy Partnership program, it might solve half of its problem; but cautioned that half of it will require going offsite for solutions.

Mr. Brase closed his remarks by indicating that his next presentation would be less conceptual and would involve unconventional solutions. He added that actions were underway to try to secure some of the federal stimulus funding to expand the energy retrofit program and accelerate UC's efforts.

Committee Chair Schilling expressed surprise at the limited impact of the solar panels relative to campus energy use. Describing it as a "daunting task," she echoed the Vice Chancellor's concern regarding the transmission of power from remote areas.

Regent Makarechian asked if the net production from the solar panels was considered in the carbon footprint calculation. Mr. Brase confirmed that each campus keeps records of its activities and their resultant increase or decrease of greenhouse gas emissions. Regent Makarechian then asked if the campuses had considered using thin film solar panels

instead of the fixed panels shown in the presentation. The Vice Chancellor explained that they were seldom used because of their relative inefficiency compared to the fixed panels. He then discussed the relative costs and efficiency of other photovoltaic configurations.

Committee Chair Schilling thanked the Vice Chancellor for his presentation and asked when the Steering Group might be back before the Regents. Mr. Brase commented that he hoped to be back in six months with proposals in hand.

The meeting adjourned at 4:50 p.m.

Attest:

Secretary and Chief of Staff

Pending Approval